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THE

WISCONSIN FARMER,

AND

NORTHWESTERN CULTIVATOR;

A MONTHLY JOURNAL,

DEVOTED TO

AGRICULTURE, HORTICULTURE,

MECHANICS AND RURAL ECONOMY.

EMBELLISHED AND ILLUSTRATED WITH NUMEROUS ENGRAVINGS.

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JANUARY, 1856.

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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AGENTS WANTED.

Thorough and active men wanted to canvass for subscribers for the FARMER, in every county of the NORTHWEST. To such as are disposed to take hold of it in good earnest, and can give satisfactory references, liberal encouragement will be given.

FRIENDS OF AGRICULTURE AND THE FARMER,

Are earnestly requested to do all they can for us in soliciting subscribers, or getting up clubs. Much complaint has heretofore been made about the irregularity of the Farmer. The present publishers assure the public that no cause for complaint in this respect will be given in future.

This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it. For terms see last page of the cover.

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Gift of Geo. Henry Mission (Ab. S. 1867)

WISCONSIN FARMER,

AND

NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., JANUARY, 1856. NO. 1.

SUGGESTIONS FOR JANUARY.

Gently as the lilies shed their leaves,
When summer days are fair,
The feathery snow comes floating down,
Like blossoms on the air;
And o'er the world like angel's wing
Unfolding soft and white,
It broods above the brown sere earth,
And fills with forms of light
The dead and desolate domain,
Where Winter holds his iron reign.

Mrs. Hale.

January opens the door of the new year, and leads the thoughtful man to look back scrutinizingly upon the past; and forward anxiously to the future. It is a proper season for reflection, and one that should lead us to a careful examination into our personal affairs, moral, social, pecuniary and otherwise. Suppose we ask ourselves a few questions: Have we, during the year that is past, improved our minds and hearts, with an additional stock of knowledge and goodness *of the right kind?* Have we added to the social comforts of our households any of the greater or lesser conveniences, that contribute to the sum of daily enjoyment?—Pecuniarily, the question is not, have we added eighty acres to our farms? but have we farmed all we had before well? Have we settled up all our outstanding accounts to the close of the year? and have we paid the ballances due? That is the important question. Let all remember that good times lead men into debt, but bad times bring the pay day, and not unfrequently the sheriff. Pay as you go, if you would sleep well.

What looks better about a farm-house than an ample and well got up wood pile, sufficient to last the whole year. Winter is the time not only to draw it, but to cut it ready for use. The man who chops his wood by the handful, as he needs to use it through haying and harvest is, to say the least, a very poor manager. Burning green wood is worse economy than people generally suppose, saying nothing about the discomfort of it. It undoubtedly takes at least a quarter more to make the same amount of heat; that is practically paying twenty-five per cent. for the privilege of burning green wood. About the same per cent. that people usually pay for being lazy and foolish. Then don't fear a cold day—it takes a mighty cold one to freeze an active, stirring man—but bustle away to the work in good season—the long winter evenings afford ample time to sit by the fire and read the papers.

Are the farm stock well provided with good shelters of some kind to lay under, and snug racks for feeding. Some good writer has said, that twenty tons of hay fed on the ground, will not go any further than fifteen fed in racks, or twelve fed in a warm stable. Here again is a loss of fifty to seventy-five per cent. for want of proper conveniences.

Unless your cellar is well secured the cold will surely creep in, one of these snug nights, and freeze the vegetables—a few minutes of timely work, may save hours of after labor of sorting rotten potatoes, and the loss of many dollars besides. Nothing is truer than that a stitch in time saves nine—look well to little things and large ones, too. We knew a man who, for the want of a shilling latch upon his stable door, lost his horse, and it cost him twenty dollars to find him; therefore beware of all these wastes, such of you as would prosper.

When you have got all your crops disposed of, your creatures carefully housed and sheltered, your next year's wood pile in a promising state of forwardness, 'tis well to take an early survey of your fence and field operations for the coming year, calculate what additional fence you will need to make, and to overhaul. Whatever new posts or rails are needed, arrange at once to cut and draw while the sleighing lasts—do not wait for the moon, nor for warmer weather; the colder the better, for the man who means to work in earnest, and wants to draw large loads—the sled slips easy when it creaks on the snow.

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Posts and rails should all be got ready, if possible, before the opening of busy spring. When posts are split, they should be hewed and straightened at once, before they get dry and hard; the bark should all be removed, as it holds moisture, and promotes decay: and the end that goes in the ground should be completely charred; as it will double its durability, and costs but a fraction.—There is no doubt but it is much better to set posts top end down as far as practicable, as it will greatly increase their durability.

For the Wisconsin Farmer

THOROUGH AND SLACK FARMING.

Messrs. Editors—From time to time I propose to discuss appropriate items, or facts, under the above caption, as they may occur to my mind.

When the early pioneers, from the New England States, first settled in Western New York, Ohio and Westward, they had to undergo severe, toilsome journeys—and after they had arrived upon their new lands, to make new homes, they were forced to submit to long years of arduous labor and pinching privations, before they could have any thing like comfortable homes; by the hardest of labor for years they had to delve in clearing off trees, and then toil more years among vexatious stumps—while communication and correspondence between the new and old States were unfrequent and uncertain—besides the new comers were rare—no floods of emigrations, as now-a-days—and years were required to lay by anything.

Not so now—and especially in regard to the States of *Wisconsin*, *Illinois*, and *Iowa*. Here the Prairies, skirted by small groves and meandered by lively streams, present vast fields and plains, in the most superb condition, all ready for the plow, the reaping and mowing machine, and all implements—free from the breakage and vexation of stumps and rocks; in fact, the farmer going on to a new place here will find his fields the first time he enters them more pleasant and easy of plowing and harvesting, than are most of the old farms "down East," which have been tilled for scores of years. Besides, in most instances, the first crop will enable the operator to lay up some surplus cash—to be used in further improvements—even more than some tolerable farmers do in years—and even more than pays for the land, the fencing, and the raising. So that the cultivator absolutely puts money into his pocket from avails of his first crop, on these Western Prairie lands—unprecedented in older States.

How reasonable, then, that hundreds and thousands of those who are delving from year to year, on old worn out farms, in the old States, for a bare subsistence—or possibly a little more—should, at once, come and settle upon our western lands—all in readiness for their plow and drag, drill and reaper—rich, fertile, and possessing every capacity to afford the most remunerating reward for labor—particularly *now*, that the means of travel to and fro are so easy, cheap and rapid—which also secures ready markets, every where, at the best prices. Many of these things seem not to be generally known—at least, not adequately considered and appreciated in the old, thickly populous states, else these advantages would be more generally embraced.

But here we come to an important consideration, upon which to make a few suggestions—that is, the too frequent practice or passion of buying and *attempting to till too much land*—thereby doing the work badly, wasting time, seed, and the outlay of capital, and failing to have proper sheds and buildings for the humane protection of stock, and the tidy, economical preservation of valuable tools and implements of every description.

It is a lamentable truth that we see, in these new States, too many far *too large farms* without barns and sheds, and with but meagre dwellings even—and this great waste and shiftlessness allowed only that the proprietor may simply own large and uncultivated tracts of land—and not being cropped or fed down, are comparatively useless. A smaller farm, with the necessary buildings and shelter for every thing, and fields thoroughly cultivated, are certainly far more profitable, comfortable, and creditable to the occupant, and the neighborhood. Tools take far more injury, and decay faster by being exposed to weather in the fields during winter, than they do by summer usage; and much extra feed is necessrry to keep up stock strong and healthy, when exposed out of doors, which would more than pay for decent shelter; while the humanity and com-

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fort of the matter, would more than compensate for the needful expense in the mind of every worthy person.

It is far more profitable and noble to raise a given amount of produce from five than from ten acres of land; and the writer knows, from experience, that by devoting *twice* the care and amount of *labor* to one acre, that is usually applied by farmers, *twice* the amount of *crop* is obtained—while half the capital in land, and half the cost in seed is saved, and the beauty of immense yield is exhibited.

To illustrate these facts, we will state one or two instances of actual occurrence, which were done in Illinois, by this writer's brother and himself. A field of two acres was prepared for corn by the brother, as follows:—During winter he drew out a fair quantity of manure on the land—spread it in the spring—plowed it about the first of May; then rowed it both ways about four feet apart with a light plow about four inches deep; then he threw a shovel full of manure into each corner where the rows crossed. He then selected good Mississippi Dent corn, soaked it in strong warm Tobacco juice 15 to 20 hours—this soaking helped it forward early, and was a sure preventive to attacks of birds, gophers, or other enemies—he hoed and cultivated the two acres well. It grew 14 to 15 feet high—and he harvested two hundred (200) bushels from the two acres. Full as much as any of his neighbors obtained from four and five acres—while he laid out about the same amount of labor and manure on the two acres that they did on five—and obtained as much crop. But they, during the season, laughed at him for puttering and taking so much pains; but they felt a different sentiment when they saw the harvest. He saved over half the capital in land—it took him less time and trouble to harvest his two acres than their five—and then he enjoyed the further profit and satisfaction of having people come from different directions to buy his corn for seed at an advanced price of about double.

Is there not a pleasant and profitable economy in this extra exertion to raise large yields from small fields, in the minds of wise men? This result tells the story.

These are simple facts, and an easy process, which any farmer may perform. Then, the following year, I tilled the same field, in a similar manner, with about the same amount of labor, and obtained an equal yield of about one hundred bushels per acre. But the final result was, that on the Fourth of July, when the field of corn was growing, a gentleman from another town came to see me—he walked through the potato and corn fields, and found my corn then ten feet high—and before he left my place, he bought the farm of forty acres (of which the corn field was part) at a price of $55 per acre, and all cash down for it. A small field of potatoes, which was also cultivated with an extra amount of labor, gave a proportionate increase of yield. This proves that the capital of two acres (at $55) $110, produced for me the same or greater gain, as those adjoining with equally as good land, obtained from a capital of $275. Larger fields may be cultivated in like manner with like results, if the operator will be so minded and strive for that end. Previous experience, in other years, proved even more favorable and profitable for me, in crops of wheat, in which I got between 60 and 70 fold—that is, over 60 bushels for one bushel sowing—while farmers generally think they do remarkably well to get 40 bushels for two bushels of sowing—which is in fact only 20 fold, and is even better than the majority of cultivators in our country do, by the present common modes of culture.

These suggestions are made to awaken farmers, and more thought and investigation on these subjects. With care and judicious management it is just as sure and easy to obtain twice and thrice the amount of yield as is done, and at even a greater proportion of profit upon the crop; and the whole result depends principally upon three things, viz: lay out sufficient care and labor in preparing the ground—then properly select and prepare the seed—put it into the ground well, and harvest in good season, and with care.

In this manner, there can certainly be more than twice the ordinary crop obtained from the same land, and at full double the usual profit to the producer—while an other small item of advantage is secured, which is worthy of thought: the reduced surface of crop to suffer waste and damage in gather ing, etc. And in fact it can be proved, and

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every intelligent farmer making the experiment, with care and in earnest, can realize the result—that by this management more money can be laid up, and more pleasure derived, in cultivating a farm of 40 acres, than is usually obtained from any farm of 160 acres, in this country.

The writer, with some of his co-laborers, has derived much advantage and assistance from agricultural *papers* and *books*—as he has not failed a single year of being a reading and paying patron of more than one newspaper and many books on agricultural subjects, for the last fifteen years. Not that any *one* paper, or book, or farmer possesses the sum of *all wisdom*, or even of superior knowledge—but each one may be acquainted with *some* useful fact that is not known to others—some experiments and results may have been made and proved in various localities, not developed in others—and thus, through the cheap medium of papers and books, (at the expense of a dollar or two) the various knowledge and results of different localities and operators are brought together and concentrated upon each place or person; and this increased wisdom becomes pleasant and useful, in proportion as it is embraced and put into practice.

Hence, the most useful work or document which is published and circulated by our Government, is the Annual Report of the Patent Office; which, with great effort and ability, collects facts, and experiments, and results, from every part of the nation, on all subjects interesting to the farmer, in all branches of his wide and noble profession—in fact it concentrates various knowledge of seeds, plants and crops, from all parts of the world, and publishes them in a large valuable book, for free circulation by members of Congress. And it would be vastly beneficial to the country, if *all* the Members would do as some *few* take care to do—send their volumes more generally to the actual farmers, and less to lawyers, doctors, and politicians, who only suffer the volumes to lie idle on dusty shelves in offices, where no one derives any particular benefit from them. The writer of this article has carefully read those large volumes, all of them, every year, since 1848—and can cheerfully say and feel that he has derived more pleasure and knowledge in reading them, than from any other works which have come under his reading. They are large books—but every page contains useful facts or information, and may be read any leisure hour through the whole year—something appropriate to every day.

All other professions, as law, medicine, &c., have their standard works, annual reports, and sectional decisions, by which to diffuse as well as concentrate all varied knowledge of interest to them; they also have their papers and periodicals, and they *read them*, too. Herein we should pattern after them, and can do it with exceeding profit. Let every farmer read his local agricultural paper, let him write for it—let him enlist more thought and intellect, and lessen the muscular, heavy toil of his business. The journal is the friendly, the social medium of communication between them, and if properly encouraged is eminently capable of increasing the pleasure, profit, and dignity of their calling. Farmers, read and study your profession—the theory, the science of it—and be assured you will soon find the practice of it to be much more easy and delightful, and less irksome.

We have a soil and region of country unsurpassed in all the beautiful and inviting resources for remunerating agricultural industry—and it should be our pride and aim to make all our efforts, in every department, correspond to the bountiful natural facilities with which we are surrounded—to make our developments commensurate to our resources. Let it be our manly ambition to produce results in our labors every where, as far exceeding the older regions, as our fresh young soil exceeds theirs. And let us also strive to make our journals as sound and original, and profitable, as our lands are rich and vigorous.

In future numbers of this paper I hope to hold mutually useful converse with my fellow-laborers, on topics interesting to us, by finding many of them sustaining and extending my feeble efforts—and let us see to it that *our* Agricultural Journal attains a character and usefulness as prominent as is our glorious State, among the young sisterhood of States.

D. S. Curtiss.

Socrates maintained that there is but one good, which is knowledge; and one evil, which is ignorance.

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GEOLOGY—APPLIED TO AGRICULTURE.

EDS. FARMER—It is my purpose in a few brief articles, to appear in successive numbers, to show that a knowledge of some of the elements of Geology, is essential to the intelligent pursuit of agriculture. It may become necessary in their progress to enter somewhat into details; but especial care will be taken to exclude mere technical terms, and to come at once to the substance of the matters under investigation. It is believed that the formal terms made use of in the various text books of the schools have rendered this study somewhat unpromising to our youth and less popular than its importance deserves If they would but consider that the language of science must be universal, and that it is not the form but the substance that is to be learned, the study would be divested of all its terrors, and it would readily be appreciated how grand yet simple, this most interresting department of human knowledge would become, even to the most ordinary comprehension.

There is not a teacher of a common school but may learn his pupils in an hour's time the general characters of every rock formation in the west, so that they will remember them in after years if they give the least attention to the subject. It is only necessary that the teacher should know them, and exhibit the most common specimens, pointing out the most obvious differences. Then it is as easy for a child to understand them, as the names of the various species of forest trees about them.

There are two great classes or divisions of rocks—those formed by, or through the agency of heat, and those originating in, or deposited by water. If we except central northern Wisconsin, there are no rocks of the first class found in place, either in this state or Iowa. They are represented by detached masses, known as boulders or "hard-heads," which outside of the lead-region, are to be found generally on the surface of both states. The second class comprise all the other rocks found over this extended area—forming the hills and solid flooring beneath the surface—and may be classed as sandstone and limestone deposits. They were deposited in water when this country was the bed of an ocean, and are continuous horizontally, being found in regular layers, and are exposed to view only where they are cut through by deep ravines or the channels of rivers, or where they stand out, as is not unfrequent, in cliffs, precipices or escarpments.

As a general truth the quality of soil of a country is to be determined by the chemical character of its rock deposits. Almost every where several feet in depth of the under lying rocks have crumbled to dust, forming the basis of the soil; and every one is aware that when rains fall upon mountains or hills the water washes down fine particles from their slopes, and transports them to lower levels. It is the composition of the elevation, then, that determines, in general terms, the character of contiguous soil. Foreign causes, however, have modified or changed its composition more or less, throughout the west. These will be treated of in their proper place.

Some knowledge of the rock deposits of a state, then, is essential to intelligent agriculture—especially to the safe selection of a new farm. When the cultivator knows the character of the deposit immediately underlying his fields, or of the hills from which they receive the *wash*, he can form an intelligent opinion as to the chemical quality of his soil; and he cannot without that knowledge. A sand and a limestone hill furnishes very different materials, as every one knows.

There are, in general terms, three very distinct layers or deposits of limestone, chemically considered, largely developed throughout Wisconsin and Iowa. The most extensive, is probably the blue limestone, or carbonate of lime. The next a magnesian limestone, the chief ingredient is, the carbonate of magnesia. Lastly, we have hydraulic or sulphate of lime. We have also two very dissimilar layers of sandstone—the "upper" and "lower." The upper has iron ore in great abundance disseminated through it, and it is probably cemented exclusively by that mineral. The lower is in places, and over extensive areas, too, composed of particles of pure limpid quartz, fit to make the best quality of glass. Could there be a greater error than the common one, of classifying soils, as clay, lime, sandy, &c., when by these terms is meant to convey an idea of the general qualities of soil?

The materials washed from a limestone ledge may be of very different value, agri-

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culturally considered—and so of sandstone. When agriculturists learn the main ingredient of their soils, it will not take them long to learn the minor, or to restore fertility where an essential element is found lacking. Fortunately, in the west, generally, all these materials are with other necessary ingredients, very well diffused and blended together. The exception to this, if at all, will be found in central Northern Wisconsin, a section very different in all its elements of soil; but a portion of the west now attracting the attention of multitudes of immigrants. It would however be very unsafe for individual farmers to conclude, from such general diffusion, that their soil contained all the elements of an enduring productiveness; that they can always plant with success, and never manure.

It will be my purpose in the course of these articles to give an analysis of the general rock deposites, when the same has been made—to exhibit by a verticle section the order of superposition and relative thickness of deposites through both northern and southern Wisconsin, to speak of some of the phenomena of the drift formation and, generally, to explain as simply as possible, a few of the fundamentals of Geological Science as applied to agriculture, and the especial reasons which should induce the farming community to acquaint themselves with this subject, to the extent at least of identifying the rocks in their vicinity. Its importance is far greater than is generally conceived—its benefits immediate as well as prospective.—In doing this the best sources of information will be followed, and the results of such an experience as has been derived from extensive travel through the state given, as may seem of special importance. Hoping that the subject may prove of interest to your readers I subscribe myself.

Very truly yours, H. A. T.

THE OLDEST FARMER IN THE WORLD.—Mr. Baggers Bagley has purchased one hundred and sixty acres of land in Minnesota Territory, which he intends settling upon and improving. Mr. Bagley is one hundred and seven years old, and is still an active and industrious pioneer, in the enjoyment of excellent health. A patent will shortly be issued to him from the General Land Office.

For the Wisconsin Farmer.

CLIMATE—EFFECTS ON AGRICULTURE.

MADISON, Dec. 10, 1855.

EDITORS FARMER—Dear Sirs: After congratulating you upon your accession to the chair editorial in so vital an enterprize as the publication of an agricultural journal in the West, and the public that we are to expect regularity in future issues, will you allow me to have my *say* about several things of obvious importance to successful agriculture in this new country.

The effects of climate seem not to be sufficiently regarded by the mass of cultivators. Southern Wisconsin and Northern Iowa, apparently lie about midway between the limits of *certain* snow and rain in winter. We have both, or neither, as successive seasons roll round. Northern Wisconsin and Minnesota have a *certainty* of winter snow, giving the earth a warm covering. Ohio, Indiana, and other States immediately south, have about the same certainty of copious rains. This difference in climate cannot but largely influence agricultural productions in the interior. The successful farmer here must provide for both extremes; yet many seasons scarcely require preparation for either. This fact has led to much carelessness and lack of forethought. Those who run the hazard of either wet or snowy winters without adequate preparation, are sure in the end to pay the penalty. Our prevailing wind is north-west—a very dry wind, which, starting on the Pacific ocean, parts with its humidity on the western slope of the Rocky Mountains, making the rainy season in Oregon and Washington Territories. After crossing half the continent, it reaches us dry and parched—a cold, but never damp, wind. Its character changes as it crosses the great lakes, by the absorption of water, and farther eastward it is doubtless a snow wind. With this fact established, is it not apparent that a system of cultivation adapted to Ohio or Northern Wisconsin, would not answer all the necessities of this region? With casual exceptions, central Wisconsin rarely feels the prevailing winds of the great lakes. With us a continuous easterly wind brings drizzling rain at all seasons. North and North-East winds furnish our winter snows, when we have any worth speaking of—but they gen-

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erally expend their force before they reach us. West and North-west winds are cool and dry,—South and South-west moist and warm. The climate of central Wisconsin differs much from her lake coasts. It is warmer and dryer on an average; but sometimes has greater extremes of cold—never of moisture. These differences of climate are often manifest in the crops in the different sections of the State. Are they sufficiently noted or regarded?

Then, as to soil, it is a common mistake to suppose it fitted by nature for *every* product. The most that can truthfully be said of it is, it has every element essential to our indigenous vegetation. But all our grains, grasses and fruits, the subjects of care and cultivation, are foreigners. They may and do thrive here, but are we, hence, to infer that without proper applications they will do so continuously? Does our wild vegetation, the decay of which has formed the surface soil, contain the perpetual elements of fertility for a vegetation in many respects essentially different? Faith in this absurdity, may ruin hundreds of fine farms yet.

The discussion of subjects of this kind, and the collection and preservation of the aggregate experience of the farming community of the State, is the proper province of an Agricultural Journal. It should be a repository of experimental knowledge, in which all may look to see what has been, and add from time to time the evidence of what should be done, to promote increased efficiency and success in this primary department of the wealth of nations. The study of climate and soil are fit subjects for a University education. It is my purpose at such times as may be convenient to ask you to put on record the result of various experiments I am making and proposing to make in the culture of fruit. Articles on that subject in the present condition of our agriculture are of the highest importance.

I am pleased to see the advanced terms for a year's subscription to the Farmer. Independent of positive knowledge that fifty cents per year will not pay for a paper worth having—printed in the west—it is certain that no one who would object to paying *two cents a week* for knowledge would profit by it, if furnished free. I am certain that I have saved $25 the past year from some hints I found in the Farmer. It is high time to cease starving editors—especially Agricultural editors. In no other form can farmers be as much profited as by such a paper. It puts in their hands all the experience and knowledge of all their associates in the State, and is the greatest labor saving machine of the times. Those who do without it are blind to every intelligent interest.

Y. F.

For the Wisconsin Farmer.

Messrs. Editors—I have had the reading of the last two volumes of the Wisconsin and Iowa Farmer, and have often wondered how so valuable a publication could be sustained upon the small pittance of fifty cents a year. I consider it just what the people of Wisconsin *all need and want*, and, hopefully, in my opinion what they *all will have*—considering it a useful, and to many, an almost indispensable branch of literature. The Apiarist and Poulterer, the Merchant and Mechanic, the Priest, Lawyer and the Doctor, and in fact every person who keeps a horse or a cow, and superintends the cultivation of a small spot of ground for a garden, can not fail to be benefitted by the reading of the Wisconsin and Iowa Farmer. The more extensive gardener, the Horticulturist and Florist, can not easily dispense with it, and no intelligent farmer who intends to keep pace with the improvements of the day, will even think of living without the reading of some such valuable publication. In my opinion the Wisconsin and Iowa Farmer has as yet been every way worthy, and if the improvement about to take place is worth anything it can not fail to be worth at least fifty cents. For my part I hail the improvement.

A Subscriber.

Fond du Lac, Dec., 1855.

Trees for Railroads.—The *Chicago Press* says that the Illinois Central Railroad Company have contracted for the planting of three rows of locust trees on each side of the Illinois Central Railroad for the distance of one hundred and twenty miles. The rows are to be set eight feet apart, and the trees three feet from each other. In eight years, it is said, the trees will furnish ties in place of those which have become rotten. They will also furnish a delightful shade in summer, and a protection from the snow drifts in winter.

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For the Wisconsin Farmer.

HEDGES—THE OSAGE ORANGE.

MILWAUKEE, Dec. 12, 1855.

The subject of Hedges is beginning to attract the attention it deserves from those who desire a substitute for the fences now in use. For this purpose no plant is now so much talked of, and written about, as the Osage Orange. Until actual experiment has demonstrated that it possesses those qualities which are essential to its complete success as a hedge-plant *for this State*, we would recommend our friends not to plant it extensively. The fact that the seedlings are frequently killed outright, and that older plants are usually 'cut back' during the winter, is perhaps reason enough for this caution. The Privet is a hardier plant than the Osage Orange. Yet in the vicinity of Albany, N. Y., long lines of hedges that had stood for many years were destroyed last winter. It is true, that it was an extraordinary winter: but a plant that will not stand an "*extraordinary winter*," is unfit for hedges in Wisconsin. It takes (from the seed) at least seven or eight years of time, and much labor, and pains, to grow a first-rate Hedge: and to use (except by way of experiment) a plant that is not perfectly reliable, is absurd. What could match the chagrin of one who, having planted and carefully nurtured a mile or two of hedge until it became a sure defense against man and beast, and by its loving beauty, a source of daily pride and pleasure, should he find that by an "extraordinary winter" his years of patient waiting and labor, are set at naught? No amount of swearing would "do justice" to such a circumstance as that! In concluding this article, we advise every one to give the Osage Orange a fair *trial*. We know that it grows rapidly, stands the knife, thickens up well, and is well armed with thorns.

The thing about it we do *not* know is—that it will stand an "extraordinary winter."

In your next number we purpose to say something about the Buckthorn. H. E.

AN Ohio dentist, now in Boston, claims to have made an important discovery in the dental art. He has discarded gold and other metals, and adopted gutta percha as a basis for artificial teeth, which it is said possesses all the possible merits of the present method of inserting plate teeth, together with many not possible in the present mode.

INSTRUCTION IN AGRICULTURE.

The extent of our country and the cheapness of land, together with the sparseness of our population, have operated to delay the establishment in the United States of Agricultural Colleges and Schools; while in the densely populated countries of Europe—especially in Prussia—these institutions are very numerous and well sustained. It is said that in this monarchy alone there are now five Agricultural Colleges, and a sixth is about to be opened, where are taught by both theory and practice, the highest branches of science connected with the culture and improvement of the soil; of Agricultural Schools of a more elementary order, there are ten; there are also seven schools devoted to instruction in the culture of flax; two especially devoted to instruction in the management of meadow lands; one for instruction in the management of sheep; and there are also forty-five model farms, intended to serve in introducing better modes of agriculture; in all, seventy-one public establishments for agricultural education, not to mention others of a kindred nature, or those private schools where the art and science of good farming are taught.

In Pennsylvania we have not yet one similar institution—no, not even in the whole United States! We are as far in the rear of Prussia, in her agricultural institutions, as we are in advance of her in our political institutions. Freedom, as we understand it, should be universal, so should a theoretical and practical knowledge of Agriculture, which is the great business of the world, and without it all others would soon perish. Let therefore, the subject be kept prominently before the people—let its all-importance be constantly dwelt upon, and we cannot permit ourselves to doubt but that a new epoch will speedily be inaugurated, and a new generation of farmeres will "take the field," who by their knowledge, skill and industry, will scatter the influence of their example over the length and breadth of the Republic, to the full development of her wonderful agricultural resources, as well as to her lasting honor and glory.

[Germantown (Pa.) Telegraph.

EXTRAORDINARY WHEAT.—The San Jose Telegraph says that Michael Marshall, living near Reed's Mill, adjoining San Jose raised eighty-seven bushels of wheat to the acre. He exhibited a cluster of wheat in the straw, all the product of one grain of Chili wheat. There were ninety heads of wheat upon this cluster; each head averaged seventy-five grains, making in the whole the extraordinary yield of 6,750 grains of excellent wheat—the product of one single grain of Chili wheat.

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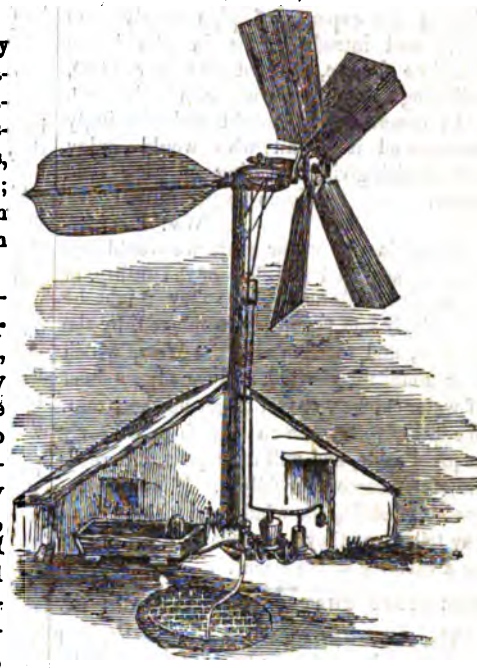
A CHAPTER ON WIND MILLS.

Wisconsin, is proverbially a windy country. Situated as it is, on an elevated table, pouring out the head waters of the great lakes and the Mississippi, and having no mountain ranges, nor heavy forests to break the sweep; hence the air is almost always in motion at all seasons, and alternating from gentle breezes, to driving blasts.

Furnishing a sufficient motor, if properly applied, to do all the mechanical business of the state. The main question is, can the winds be practically and usefully applied, in a convenient and durable manner? and at a reasonable expense, to the purposes of pumping, sawing, threshing, cutting feed, driving the machinery of mechanic shops, &c., &c. In a word, can the common farmer, manage a wind mill, after it is properly put up, and make it answer more cheaply and advantageously than any other power?—This is the great and main question, which we wish to answer, to the satisfaction of our numerous farmer and mechanical readers.



The question is in a fair way of being settled, soon, as a good deal of mechanical ingenuity is being directed to the subject at the present time; and almost every agricultural paper contains a plan, of some new and improved machine for the purpose.

Accompanying this, we give a cut of Halladay's Self-Regulating Wind Engine. It is highly spoken of by the eastern press, and by some of the most scientific, and mechanical men of the country, and is being extensively manufactured, by a Connecticut company. To more fully apprise our readers of its character and success, we insert the following letter in regard to the mill.

GREEN HILL, (near Wilm.) Del.,
January 8th, 1855.

DEAR SIRS:—I have now had one of your wind mills in use over four months, and so far it has not required the least alteration or repair. It has withstood all the very severe fall and winter storms we have had, without the least injury. When it is thrown out of running order, there is nothing exposed to the wind except a post *six inches square*, and the *edges of the wings*. The faces of the wings are never (as in the ordinary ones) forced to resist the wind when not pumping.

There have been one or two wind mills blown down in this neighborhood since I have had mine put up; but "Halladay's" has withstood it all without the least injury, and in every respect gives me entire satisfaction.

Most of the time it has been thrown in and out of running order by our cook, without leaving the kitchen; and we have always had an ample supply of water. The size used is No. 2, 4 fans.

My reservoir holds from five to six hundred gallons of water, and I have known it to be pumped full in three hours. I have a double acting pump placed inside of the barn (some sixty feet from the well); this I have done to prevent it from freezing, and am pleased with the arrangement.

With my present experience. I would advise a reservoir to be put in, that would hold at least, ten or fifteen hundred gallons, so as to be thoroughly provided against the long calm weather we sometimes have in summer.

Halladay has published a pamphlet giving a full description of the mill, which would give you a much clearer idea of it than I can, not knowing the technical terms of all the different parts.

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P. S.—The mill, pump, reservoir, (including the expense of pipe nearly 300 feet,) and introducing it in the house complete for use, did not cost over $400, including hot and cold water in bath-room.

In conclusion, I would unhesitatingly recommend it to all who would enjoy the health-giving blessing of pure cold water. Yours respectfully.

WM. PYLE.

In conclusion, on our part, we would say, that we are well satisfied of the utility, of these wind mills and believe they might be extensively and profitably employed, by the farmers, and mechanics of the West, which is so abundant in wind, and usually so short of water power, or fuel to get up the steam. We intend to try one on our farm as early as practicable, and will duly post our readers of our success, or failure. If we can succeed in chaining the winds, and making them pay tribute as they pass, we consider it will be a valuable achievement.

THE STUFF THAT CLOVER IS MADE OF.

The clover plant, when properly cultivated and properly used may be made one of the most valuable aids to the farmers of Maine that they have.

It is good for feeding animals, and it is good for feeding the soil. This makes it very valuable. Let us see what stuff it is made of. Various analysis have been made by different chemists, and the general results are very much the same. The variations are such as might be expected from the different circumstances of growth, &c.

The most recent analysis, we believe, is that of Professor Horsford. After burning the plant to ashes, he found the one hundred parts of these ashes contained almost twenty-three parts of carbonic acid, and little more than one part of coal and sand.

He then examined what was left, after deducting out the carbonic acid, and the coal and sand. He found that 100 parts of this last contained 16 parts 1 thousandth of another part of potash—that is, a hundred pounds would give you over 16 pounds of potash—soda, over 40 pounds,—magnesia, over 8 pounds,—chlorine, 2 pounds,—phosphoric acid, nearly four pounds—sulphuric acid, over 1 pound, silica, (flint) 2 pounds.

We have stated these things in the rough, and you must remember this is one hundred pounds of the ashes, and not of the clover itself. It takes 100 pounds of the clover itself to make 11 pounds of ashes, or eleven hundred pounds of the clover to make one hundred pounds of ashes. According to this, the above amount of articles are to be found in eleven hundred pounds, or a little more than half a ton of clover hay.

From this it would seem that ashes which contain potash—plaster which contains lime and sulphuric acid—and salt which contains soda and chlorine, would make good fertilizers for clover, and experience proves that they are. These are the mineral ingredients, but clover also contains gum and sugar, which may be resolved by analysis into carbonic acid, oxygen and hydrogen, much of which it obtains from the atmosphere.

In plowing under clover we return to the soil a substance of dressing which has collected and packed away in its systems or organs, a large proportion of the ingredients above named, and which, when the clover decomposes, gives them forth in a soluble form for the use of such crops as may be planted in its place and may need them.

The wheat crop requires most of the same ingredients, though in different proportions. The corn crop (Maize) requires a large proportion of potash, and would be benefitted by such a dressing. Hence, clover which by its broad system of leaves, can obtain from the atmosphere many of the gaseous materials necessary for its formation, and by its deep and strong spreading roots can gather from the soil mineral matters, changing and elaborating them into different combinations, is well fited to be an agent in a system of rotation, and becomes an improver when properly used for that purpose, either when fed to cattle and then manure used therefor, or when plowed under as a green crop.

[Maine Farmer.

SQUASHES AND CABBAGES.

From an address before a Farmer's Club in Maine, we take the following, which we think contains some good suggestions:

One of the advantages we are to derive from this Society is the classification it will afford us of different vegetables. Take, for example, the Squash. Now to a person but little acquainted with the subject, the number of varieties would appear to be almost infinite, but a little attention will inform us that they may all be arranged in three natural classes:

First, the Summer or Gourd Squashes.—These are distinguished by a hard rind, a dry, spongy, whitish pulp, and small, thin seeds when ripe, consequently they are suitable for the table only in an immature state. The variety known as the Canada squash may be easily raised in sufficient quantity for an ordinary family in two or three hills, by digging a large cavity, filling it with well composted manure, placing around it four bricks, and over them a square of glass, and you may have squashes early in July.

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The second class includes the Pumpkins and crook-necked squashes. You may easily recognize this class by its rough and deep leaves, the stem five furrowed, tapering at one end—the fruit of an orange color within, a circular scar at the blossom end, and large thin seeds.

The third class includes the Valparaiso and Marrow squashes. These have a large rough leaf, not loped, unless hybridized, stem short and thick, flesh orange colored, a small tubicle at the blossom end, and large plump seeds.

Now with these characters we are at once enabled to classify all the varieties of the family, detect cases of hybridization and supply our garden with what we want. I might here add that the whole squash family was not known till the discovery of America.—The same remarks would apply to the almost innumerable varieties of the bean among us, which would enable us to reject many kinds in order to give place to better ones.

For the want of such knowledge thousands of persons who cultivate a garden would as readily set out a hundred plants of the early York Cabbage as any for winter use. They hardly stop to inquire whether they would keep till winter. While on this point let me say a word on the varieties of the cabbage for cultivation. There is the large drum head, which I presume all know. This is a winter cabbage. There is next the Savoy with its curly, crispy looking leaves, which is good for early winter, and lastly, the early York, which you will recognize by its smooth leaves and bold appearance. This is only suitable for fall use. The Savoy is unquestionably our most valuable cabbage, but it should be planted as early as possible in the spring if we wish to secure a large head. A small box set in a window the first of April, and sowed with cabbage seed will furnish a fine supply of plants to be transplanted the 20th of May.

[Oxford Democrat.

THE FARMER'S FUTURE.

An English correspondent of the N. York *Tribune*, expatiates on the prospective introduction of steam power as an aid in agricultural operations, as follows:—"The Farmers' Future will be found in the *application of steam to the cutiivation of the soil!* We are rapidly coming to the conclusion here that the good old plow is a humbug. We begin to think that spade-husbandry applied by steam is the right thing; indeed, there are some among us of the opinion that a machine may be invented which should, in effect, plow, sow, harrow and roll altogether—a machine in fact, which should make a seed-bed and sow the seed all at one operation. There has already been one steam-engine exhibited in this country which will walk anywhere, and do anything it is required to do. It has feet about the size of yours, Sir, and it puts them down upon the ground, one after the other, very much in the fashion of a dandy going up Broadway, only the feet of the machine are fixed on wheels, and revolve regularly, instead of moving up and down awkwardly, like his. This machine will go through a plowed field very comfortably, and rather quicker than a good hunter will get over it; and as it will drag a dozen plows after it, I do not see, for my part, why it should not be made to carry, as part and parcel of itself, a mechanism that will readily convert the untilled ground into a seed-bed. Well, then as to drainage. I saw a machine the other day that would dig, drain, and lay down sixteen and a half feet of piping per minute, the pipes being rather more regularly and satisfactorily laid than any skilled workman can lay them.—The machine labored under the disadvantage of being cumbrous, and of being made to be worked by a stationary engine. But having got thus far, it seems to be only one step further to give us steam application to the soil so as to enable twenty times the quantity of land to be put under cultivation by the same amount of labor, and at no greater cost than now. Then we may hope for a produce of cheap corn, the great desideratum in this land of sweat and toil, where it depends upon a shilling or two, more or less, in the price of food, not only where a man can reap the advantages of his labor, but absolutely, too often, whether he can continue to exist.

Yes, to the application of improved machinery to the earth must we look for an accession of home comforts, of world-wide prosperity, of universal happiness! To Thee! O, bountiful God of Nature, we offer our first thanks that Thou hast given us the great seed-bed whereon we live and move, and whence we have our being. To Industry be given our best next tribute, and then let us thank Art and Science that teach us how to make the best uses of the means so bountifully placed at our disposal."

To Fatten Fowls.—Fowls may be fattened in four or five days by the following process:—Set some rice over the fire with skimmed milk, as much only as will serve one day. Let it boil till the rice is swelled out; add a teaspoonful of sugar. Feed the fowls four or five times a day in pans, and give them as much each time as will fill them.—Great care must be taken that they have nothing sour given them, as that prevents their fattening. Give them clean water or milk from rice to drink. By this method the flesh will have a clear whiteness.

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STOCK REGISTER.

RINGBONE OCCURRING IN HORSES.

Ringbone is a form of exostotic disease, the pathology, or nature of which, not differing materially from spavin and splint. Its location is the pastern bone. Most generally, the joint is involved, so that the final result is *anchylosis*, (loss of motion) in the joint formed by the *os suffraginis*, and *os corona*, (large and small pastern bones.)

Nature of ringbone.—The term *ringbone*, is far behind the times as regards our present knowledge of *nosology*, (which signifies the doctrine of the names of diseases;) yet to the unprofessional, it is somewhat suggestive, and therefore may as well be retained. It signifies a circular eminence around the pastern bone. The ring is formed by incrustation, or *osseous* deposit around the bone, or joint, as the case may be; yet, in order to make out a case, that comes strictly within the meaning of the word—that is, as horsemen interpret it—there must exist complete *anchlosis* of the pastern joint.

Various osseous deposits are now and then thrown out on the pastern and coronet bones, varying in shape, size, and seat; they are often unaccompanied by lameness, and consequently, stable-men have named them "*cling-fasts*," or something of the sort.—They all, however, come under the disease known as *exostosis*.

A pure case of ringbone—*anchylosis*—generally has an external origin; we find that an osseous deposit commences at the lower margin of the pastern, an upper part of the caronet bones; this spreads so as to involve both joint and ligamentary tissue; and if there be any predisposition in the animal, to *ossificic* diseases, the malady may spread, so as to involve fetlock, pastern, and coffin joints.

Causes of Ringbone.—This disease, in many cases, is hereditary, transmitted, either directly or indirectly, through the sexual congress. We shall not contend that its *direct* origin is a settled point, but merely intimate, in support of this opinion, that we have seen colts of only a few weeks' growth the subjects of this disease. We once bought an unweaned colt, and brought it up by hand, as the saying is. At the age of four months, we observed tumefaction on the pastern of both hind legs, which ultimately resulted in stiff joint. The little creature had never been subjected to any sort of labor or exercise to produce lameness, and therefore the disease must have originated at birth. Mr. Percival, whose opinion on veterinary matters is unquestioned, says that his attention to the *hereditary origin* of ringbone, was first aroused from a remark made by an extensive dealer in horses, in reply to a question put to him, how it happened, that but few ringbones were met with, compared to the number attracted notice in times past. The reply was: "Because no breeder of horses now-a-days, will send a mare to a horse having ringbones," a very good example for American horsemen to imitate; for a vast number of our best, as well as inferior horses, are the subjects of this infirmity.

Of the *indirect* transmissibility of this disease, we have ample proof. It lurks in breed, just as scrofula and consumption do in the human subject.

The author just quoted, remarks, that "a coarse, or half bred, fleshy or bony-legged horse, with short and upright pasterns, is the ordinary subject of this disease; and there exists satisfactory reasons, why we should expect him to be so. The pastern and coffin bones constitute the nethermost parts, the pedestrals—of the columns of bones composing the limbs, and being so, they receive the entire weight and force transmitted from above. The pastern, being long and oblique in position, receives the superincumbent weight, in such an indirect line, that, bending towards the ground with the fetlock, nothing like jar or concussions follows. The very reverse of this, however, happens every time the foot of a limb, having a short, upright pastern, comes to the ground. In such, instead of the weight descending obliquely upon the *sessamoids* (two small bones at the posterior and inferior part of the fetlock joint,) and the fetlock bending therewith, it descends directly, or nearly so, upon the pastern, making this bone entirely dependent on the bone beneath it—the coronet—for counteracting concussion; and should anything occur to diminish this, or to throw more weight on the bones beneath than they can counteract, jar of the whole apparatus ensues; and an effort of nature to strengthen the parts by investing them with *callus* and ossification, is likely to be the ultimate result. For we would view ringbone, disease though it must assuredly be called, as frequently in young horses, a recourse of nature to strengthen weak parts—the bones being equal to the exertions or efforts required of them."

From the fact, that horses of the above peculiar conformation, are most subject to this malady; and knowing, as we do, that defects and faults *acquired*, become *permanent*, in the race! all doubts as to *indirect*, hereditary origin are set at rest.

The *direct* causes of ringbone, (and at times they are merely *exciting*,) are ligamentary strains, brought about by over-work, extraordinary efforts of speed, *pulling up* suddenly, &c. In short, either *sprain*, *injury*, *blow* or *bruise*, likely to produce inflamatory action, in the region of the pastern joint,

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may result in ringbone. Still, we contend, that, aside from such causes, there must be, lurking in the system of the subject, a predisposition, denominated by human practitioners, *idiosyncrasy*,* a weakness in *bone*, *limb*, or *ligament*, the result of errors in breeding, aggravated by a too early use of the muscular powers, and want of proper attention to food and stable management.

It appears, therefore, that there is no *direct*, or *specific* cause for ringbone, and we can only regard as *indirect*, those causes which, in a large majority of cases, are invariably present.

Treatment of Ringbone—Preliminary Remarks.—It would be very interesting and funny to notice some of the methods of treating ringbone; but the subject of this malady is a creature whose mental and instinctive capacities combined, far surpass those of any other animal, and indeed, do not differ, in kind, from the mental nature of our species; —in degree, however, there is evidently some difference.

There is a common error abroad, and in some of the popular works on farriery, the error is stereotyped, that "*ringbone is fed by a bladder at the posterior part of the pastern*; which has just about as much to do with the disease, as we had with the late victory achieved by the "Know-Nothings." This error, however, would not amount to much, only that it has led to the infliction of a cruel operation, without the least advantage. In short, it tends to make matters worse than they were before; for this bladder is in reality a *bursal sac*, the use of which is to secrete and contain a fluid called *synovia*, (known as joint oil,) used for the purpose of lubricating tendons and their articulating surfaces, so as to prevent friction; therefore its extraction must be disadvantageous to the limb.

It is not enough, forsooth for the poor brute to suffer this excruciating torment, which usually attends inflammation and ossification of the parts; but he must, in addition, submit to a species of cruelty unheard of in the annals of human medicine; and for which, *veterinary science* furnishes no authority. It has been our painful duty, occasionally, to take in charge subjects that have been most shamefully maltreated in this respect, and we have seen others that have been the subjects of cruelties,, that would make a Christian shudder to think of; (see "Modern Horse Doctor," p. 278;) and we do hope that the reader, if he be in any way interested in horses, will set his face against every species of barbarity practiced on them; and endeavor to aid those who are now engaged in the work of reform. We feel assured that if the American people were better informed, as to the nature and treatment of diseases occurring among live stock, these evils would cease to exists. But a new era is dawning. America will ere long boast of he veterinary schools, and from them shall go forth a class of the right kind of men, to illuminate the comparative darkness that now exists.

Now as regards the *treatment*. The idea of *curing* ringbone is really absurd, nature never intended that it should be cured. The new growths, if we may so call them, and the changes that take place in the joint, are a part of nature's own handiwork, in view of strengthening a weak bone or a joint; and therefore, there is no need of cure. To attempt a cure, can be regarded in no other light that forcing nature to turn a somerset! Our object in the treatment, is merely to aid nature, (that is, all the assistance she requires of us.) All we have to do is, to excuse the animal from work, and apply remedies that are calculated to relieve pain, and lessen lameness. We treat the disease when first discovered, just as we should a recent spavin, or splint, by cooling lotions, cold water bandages, &c. If the parts are inactive, we apply the usual counter-irritants—blisters, &c. In all cases, therefore, of ringbone, whether it have a periosteal, bony, cartilaginous, fibrous, or synovial origin, rest, light diet, and the above means, are most calculated to promote *anchylosis* of the joint, which is nature's cure.

As regards the bony tumor, that is generally nothing more than an *eye-sore*, and very seldom causes pain, (that is, after the new formations are completed.) There is some stiffness ever after to be observed, but that is not due to the tumor, but is the natural consequence of stiff joint.

[American Veterinary Journal.

Idiosyncrasy.—A peculiarity of constitution, in which a person is affected by certain agents, which, if applied to a hundred other persons, would produce no effect; thus some persons cannot see a finger bleed without fainting; and thus evident inflamation is induced on the skin of some persons by substances that are frequently innocent to others.—*Hooper*.

Iowa for Sheep.—The climate of the Central and Northern parts of Iowa, seem to be particularly adapted to wool growing. The winters are very dry and free from rainy weather which is indispensable to a wool growing country. The sheep here look very healthy and robust, and carry heavy coats of wool. Sheep do at least fifty per cent. better than in the north-east part of Ohio. The wolves are somewhat troublesome, but can soon be thinned off by using strychnie.—Wool growers should come to Iowa.

[Ohio Cult.

To Remove Wens on Cattle.—Mix fine salt and tar, and rub the same on the wen. I have seen very bad ones cured in this way, in six weeks.

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ON THE FEEDING AND CARE OF COLTS.

An opinion generally prevails among farmers, that from the time the foal is taken from its dam up to coming maturity, it should not be "*pushed*," as the saying is, nor fed on grain for fear it might injure one so young and tender. This accounts for the great number of moping, or spiritless and unthrifty colts, that are scarcely able to drag one leg after the other. Their very appearance, cadaverous and pitiful looks, seem to convey to the mind of every *sensible* man that they are the victims of a wretched system of starvation, which enervates the digestive organs, impairs the secretions and impoverishes the blood.—Hence the deficiency in the devolopment of bone and muscle. The muscles and tendons being so ill-supplied with material for growth and development become weak, and afford but little support to the bones and joints, so that the former become crooked and the latter weak—defects which no after feeding, no skill in training, can counteract. The digestive organs of these young animals are not calculated to extract nutriment from such inferior provender as many of them get; consequently the cravings of hunger compel them often to gorge themselves with the same, merely to keep the vital spark ignited. The result is that they over distend the stomach and bowels and become "*pot bellied*." Such a miserable mode of feeding is the principal cause of the generation of intestinal worms; on the discovery of which the owner cries out worms! worms! and thinks he has discovered the cause of the colt's unthriftiness; and then commences drugging the animal for the same with vermifuges that would oftimes kill a *well* animal; to say the least, many of the extolled drugs prove more injurious to the digestive organs than to the worms. And suppose he succeeds in physicing off the worms they appear again, and the case is as bad, and even worse, than before; because physics debilitates the animal. Whereas, the owner should remove the cause, which exists in the form of innutritive diet.

It should be known to breeders that from the time of birth up to maturity, colts require food abounding in flesh making principle, nitrogeneous compounds, oats, corn, etc.; otherwise they must necessarily be deficient in size and powers of endurance.

This truth may be illustrated by analogy. For example, we desire to raise to perfection and full proportion, any particular vegetable production. In order to do so we may select soil or furnish the same with the elements of the organized tissues of such vegetable, or how can we expect it to become perfected. Just so with the colt; the elements of its organized tissues must be furnished of proper quality, and in proper quantity in its food and constantly during its season of growth. if symmetry, and beauty of form and strenth of muscle is desired.

Colts should be regularly fed and watered; their food, to consist of ground oats, wheat bran and sweet hay, in quantities sufficient to promote their growth.

Another bad system is, that of not providing proper shelter for such animals; they are often exposed to the vicissitudes of the weather, under the false notion of making them *tough* and *hardy*. I know not what the benevolence of some men consist of when they suffer a poor uncomplaining brute to endure both neglect and hunger without remorse.

Equally unwise are those men who confine their colts to close unventilated and filthy stables, deprived of light, exercise, and pure air. Can we wonder at their wretched appearance? Colts should be groomed every day; a clean skin favors the vitalization of the blood. They should be permmitted to *gambol* about as much as they choose. Exercise develops muscle, make an animal active and spirited, and increases the capacity of lungs and chest. By the above means, and proper attention to the principles of breeding, the business of raising colts may become both creditable and profitable.

[I. Michener, in Veterinary Jour.

GREEN FOOD FOR FEEDING.

On the feeding of cattle which has been so much discussed of late, Mr. Lawrence, of Cirencester, has an article in the Journal of the English Agricultural Society. He says:—When I commenced feeding bullocks, some years ago, I depended mainly on the experience of others, and was in the habit of noting down the allowances of the different kinds of food recommended in the agricultural periodicals, and otherwise, by men of reputed authority in such matters. The quantity of roots usually recommended I have observed to be from 1 to 1 1-2 cwt. per diem,

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and for large bullocks even up to 2 cwt., and that without admixture. Now, what is the object we propose to accomplish? It may be assumed for our present purpose we are dealing with animals at maturity in point of growth, that the skeleton is fully developed, and that we have only to accumulate flesh and fat. It must ever be borne in mind that it is not the quantity of food put in the stomach of the animal which accomplishes the object in view, but that which is thoroughly digested and assimilated by the healthy action of the viscera. The setting before a bullock half a cwt. of neat roots the first thing in the morning, some hours afterwards its allowance of more solid and nutritious food, and repeating the feed of roots in the evening, appeared to me an irrational proceeding; and, on the other hand, that a due mixture of the solid and fluid foods would probably aid the proper digestion of each. I resolved therefore to diminish the quantity of roots which I had generally heard recommended one half, viz., from 70 pounds to 80 pounds per diem, according to the size of the animal, and to give a portion of these with each feed, as intimately incorporated as might be practicable with the more solid food. With this view I obtained Moody's cutter, which cuts the roots into hin ribands; these we turn over amongst the chaff, so that the animal cannot avoid eating them together. I observed that the animals under the change to which I have adverted throve faster, and were kept equally clean with one-third less litter, by weight, than we had found necessary on the former mode of feeding.

GRAIN FOR STORE-SHEEP IN WINTER.

The expediency of feeding grain to store-sheep in winter depends much upon circumstances. If in a climate where they can obtain a proper supply of grass or other green esculents, it would, of course, be unnecessary. Neither is it a matter of *necessity* where the ground is frozen or covered with snow for weeks or months, provided the sheep be supplied plentifully with *good* dry fodder. Near markets where the coarse grains find a good and ready sale, it is not usual in the North, to feed grain. Remote from markets, it is generally fed by the holders of large flocks. Oats are commonly preferred, and they are fed at the rate of a gill a head per day. Some feed half the same amount of (yellow) corn. Fewer sheep—particularly lambs, yearlings, and crones—get thin and perish, where they receive a daily feed of grain; they consume less hay; and their fleeces *are increased in weight;* upon the whole, therefore, it is considered good economy. Where no grain is fed, three daily feeds of hay are given. It is a common and very good practice to feed greenish cut oats *in the bundle*, at noon, and give but two feeds of hay—one at morning and one at night. A few feed greenish cut peas in the same way. In warm, thawing weather when sheep get to the ground, and refuse dry hay, a little grain assists materially in keeping up their strength and condition. This may furnish a useful hint for many parts of the South. When the feed is shortest in winter, in the South, there are many localities where sheep would get enough grass to take off their appetite for dry hay, but not *quite* enough to keep them in prime condition. A moderate daily feed of oats or peas placed in the depository racks would keep them strong, in good plight for the lambing season, and increase their weight of wool.

Few Northern farmers feed Indian corn to store-sheep. It is considered "too hot and stimulating," and sheep are thought to be more liable to become "cloyed" on it than on oats, peas, etc. I never have fed it to sheep sufficiently to speak advisedly on this point. A neighboring flock-master whose admirable arrangements for keeping sheep are only equalled by his usual success, lost most of a large flock of lambs a few winters since. They received all they would eat of the best hay, and, as the owner *supposed*, a half gill of corn a head per day. They were in fine order in the beginning, and for some time into the winter. During a thaw, when they got a little off from their feed, and looked "hollow," the shepherd, without the knowledge of the owner, increased the feed of corn. This caused them to eat still less hay, and the shepherd not only continued but increased the allowance of corn as their appetite for hay diminished. In a short time they ate scarcely any hay, and soon after began to eat their corn very irregularly. Their stomachs were now so completely deranged, that they would not eat *anything*, in quantities sufficient for their subsistence, and they perished rapidly and miserably. The same consequences might doubtless have ensued from feeding *other grains*, in the same improper manner. But I am inclined to think that the evil would have been less rapid and remedilesss with some other grains. I do not consider yellow corn a very safe feed, at least for lambs and yearlings. From the obviously different character of the large-Southern varieties, I presume they would be less, and very probably not at all, objectionable for sheep feed. Half a gill of yellow corn, or a gill of oats per head, is a sufficient daily allowance of grain. While there can be nothing more absurd than the German *starving* system to increase the fineness of the wool, excessive fatness is not to be aimed at, especially in breeding ewes. Store sheep should be kept in good fair, *plump* condition.

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Lambs and yearlings may be as fat as they will become on *proper feeding*.

It will not do to suffer sheep to get thin in the winter, with the idea that their condition can at any time be readily raised by better feed, as with the horse or ox. It is always difficult, and unless properly managed, expensive and hazardous, to attempt to raise the condition of a poor flock in the winter —especially if they have reached that point where they manifest *weakness*. If the feeding of a liberal allowance of grain be suddenly commenced, fatal diarrhoea will frequently supervene. All extra feeding, therefore, must be begun very gradually, and it does not seem, in any case, to produce proportionable results.

I have seen it stated that sheep will eat cotton-seed and thrive on it. If this be true, this must, of course, be a far more remunerating application of that product, than as a mere *manure* to soils.

[Randall's Sheep Husbandry.

CHARCOAL—ITS ALIMENTARY CHARACTER.

Some farmers are disposed to ridicule the idea that in the simple and hitherto disregarded article of charcoal, the agriculturist possesses an assistant of great and surprising energy. Yet such is the fact, indubitably, unless all science is to be regarded as a mere house of cards, built up to be thrown down again. But it is not for the purpose of defending it against the cavilling and carping spirit of such as deny its claims to the character of a manurial agent, that we now take up the pen, but rather to present a few isolated facts in reference to its capacity of acting in some cases, and under somewhat peculiar circumstances, as a substitute for the food of animals, instead of an aliment of plants The incidents given below, in illustration of the truth of the position suggested, are from the most reliable sources, and may be depended upon as strictly rigorous and correct.

Many years since, while one of the Liverpool traders was fitting out in the port of New York, a pig was missing from on board and was supposed to be lost. After taking in her cargo the vessel put to sea. A few days after, it was found that the pig supposed to have been lost, was in the coal-pen, but as the location of the latter rendered approach somewhat difficult, it was concluded to leave the animal to his fate. At the termination of the voyage his pig-ship was not only found to be alive and well, but very considerably improved in condition, though with the exception of charcoal, there was nothing within his reach which he could have swallowed from the commencement to the conclusion of the voyage—a period of nearly 30 days.

"A family being driven from the city of New York by the fever, were absent six or eight weeks before it was deemed prudent to return. A number of fowls confined in the loft of a workshop, were forgotten at the time of leaving, and as it was known that there was nothing provided for their subsistence, it was expected on their return that they would be found starved to death. To the astonishment of all, the fowls were found alive and fat, though there was nothing upon which they could have fed, except a quantity of charcoal and shavings; water being supplied from the grind stone trough."

The following experiment was made by a gentleman of New York, to whom the foregoing facts were communicated by a friend:

"He placed a turkey in a box or enclosure, four feet long, two feet wide, and three feet high, excluded light as much as could be done, and allowed a free circulation of air, and fed the turkey with soft brick broken fine, pounded charcoal, and six grains of corn per day. The box was kept locked. At the end of the month the turkey was large and heavy, and on being opened was found filled with fat. Nothing, on dissection, was found in the gizzard and entrails but charcoal and brick. Last winter the experiment was repeated with the same success."

A late writer on this subject says:—"When it is remembered that wood, sugar, and several other substances, some of which are most nutritive, are compounded of nearly the same original elements, it would seem possible, by animal chemistry, to convert them to the purpose of sustaining animal life though all experiments with wood or charcoal have failed." [New England Farmer.

Do Something.—Resolve to do something useful, honorable, dutiful, and to do it heartily. Repel the thought that you can, and therefore you may, live above work and without it. Among the most pitiable objects in society is the man whose mind has not been trained by the discipline of education; who has learned how to think, and the value of his immortal powers, and with all these noble faculties cultivated and prepared for an honorable activity, ignobly sits down to do nothing; with no influence over the public mind; with no interest in the concerns of his country, or even in his neighborhood; to be regarded as a drone, object or character, with no hands to lift, and no effort to put forth to help the right or defend the wronged.

Kick in the Stifle.—Put in fine salt and nothing else. This is a serious accident, and is supposed by many to be certain death; but the above remedy often proves successful. [Exchange paper.

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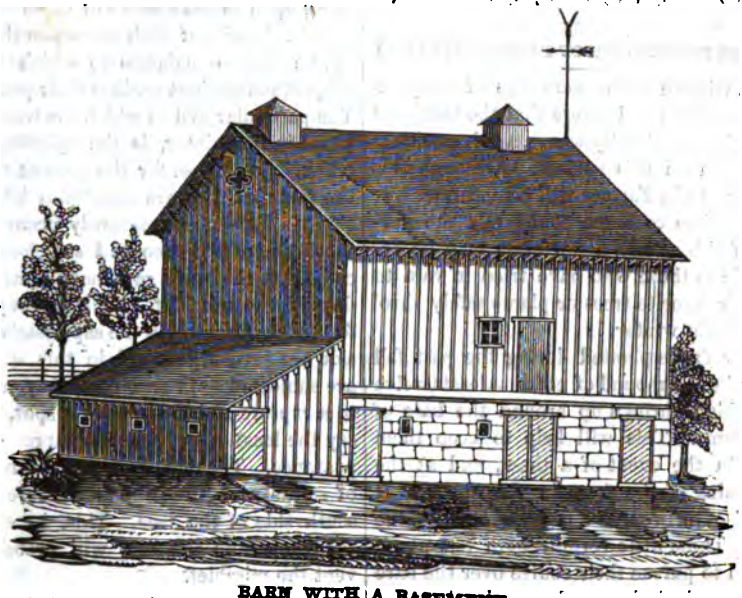
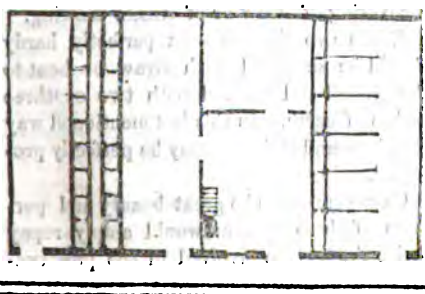


BARN WITH A BASEMENT.

As many of our readers are probably planning to build barns, during the coming summer, we thought it appropriate to offer a plain, but neat and convenient plan, for a common farm barn. A side hill, or gentle slope, is its appropriate situation; with its yards opening to the south or east. Its ground size is 30 by 40 feet, besides the lean-to, or addition; which should be about 12 by 30. The posts above the basement wall should be 18 feet high, the beams over the main or threshing floor 14 feet high, in the clear. The large doors should be 10 feet wide, and twelve feet high. The ground plan exhibits the basement. On the right hand is the stable, with six stalls for horses, on the left is two stables, to accommodate eighteen cattle; their mangers face each other, with a three foot alley between, in which to walk and handle the hay and feed.



There needs to be a hole from the mow above, down into the middle of this alley, through which to pitch the hay. Between the stables and on the back side, is a root cellar 12 by 14 feet; in front of it is a room for cutting, mixing and storing feed, hanging harness, &c., &c. Thus the basement makes a little world of room, of just that kind that any good farmer needs: it will be warm in winter, and cool in summer.

The upper story may be arranged with a centre floor 12 to 14 feet wide, for threshing, &c., with mows upon each side; on one side, as high as the scaffold can be fitted up for a granary, and carriage room.

The stairs from the main floor into the basement, render the whole connected and convenient. The cattle stables may be fitted with stanchions or ropes to tie with, as best suits the taste of the owner. The same plan may be adopted without the basement, where the nature of the ground or the means of the builder, do not warrant it. So with the lean-to, it may also be omitted, if so much stabling is not needed. The entire plan carried out as here presented, would cost from three to five hundred dollars, if well done throughout, besides what a farmer could do himself; depending of course, much upon location.

HORTICULTURE.

WINTER PROTECTION OF TREES and PLANTS.

In a climate with alterations of temperature so sudden and severe that the Oaks and Hickories seem hardly secure, a volume might be written on this subject. Although this number of the Farmer will come rather late to its readers to serve completely the purpose of this article, a few hints may be acceptable to those who have tried in vain to get their favorite trees or plants safely thro' a Wisconsin winter.

Fruit Trees planted during the past fall should have a mound of earth at least twelve inches high thrown up around the base of their stems. This will help to keep them steady in the event of a thaw, and at the out-coming of the frost in the Spring. It will also answer as a defense against the Mice. These little vermin seem not at all inclined to pursue their course over the bare earth—particularly not, if it carries them upward. Perhaps the most certain protection against them and the Rabbits is that recommended by Downing in his Fruit Book, i. e., Coal Tar from the Gas Works. It may be procured at a trifling cost, and is applied with a brush to the lower part of the trunk. Soot and milk may be used as a substitute. These are mixed to the consistence of paint and applied on a dry day. A keen and remorseful sense of the loss we suffered during the last winter, (twenty-four trees of an hundred ruined!) impels us to urge upon those whose trees are exposed to injury from this cause to attend to them *without delay*.

Pear Trees that have been moved during the year, are exposed to the "frozen sap blight." The effect is manifest in the spring by a blackened spot on the trunk. It usually appears near the base, at the junction of the scion with the stock, and if neglected is apt to "strike in" and destroy the wood adjoining. The mound of earth mentioned above or, (as it sometimes affects the tree higher up on the stem) a hay-band wound closely on, will perhaps defend the tree from injury from this cause.

Cherries.—These are "hard cases" and during winter months are very much in the habit of going on a "bust." Our pen begins to move more cautiously! We will try and not commit ourselves in such a way as to bring upon us the assaults of those who have certain theories of their own upon the causes of the various maladies to which they are subject, and the best mode of their prevention. The particular evil to which the trees are exposed in the winter, is the splitting of the trunk. [We chose for the present to ignore the fact that they are sometimes killed outright.] This most frequently occurs on the south side of the tree and sufficiently indicates that the sun's rays have something to do with the mischief. And so they have; for under their action the sap vessels on that side are surcharged. If, in this state, they are subjected to intense cold, they are liable to a rupture and the tree to a split, that, to say the least of it, will not improve its appearance. The remedy we suggest is a board of suitable length set up and secured to the south side of the tree. This, by shielding the trunk from the sun, will probably prevent the mischief.

Dwarf Pears.—The roots of these favorite trees are liable to injury from a concurrence of circumstances, which the Fruit Growers of New York experienced last winter. The earth, bare of snow and filled with water, was suddenly frozen hard to a great depth and thousands of trees were grievously injured. We have heard of no losses from this cause in Wisconsin but it will be well to provide against them. This may be done by covering the ground over the roots from four to six inches deep with short manure from the horse-stable.

Grape Vines—In situations where they are not perfectly hardy, should be laid on the ground and covered with litter or, what is better, with one or two inches of earth.

Evergreens—that from any cause are weak or sickly, are very liable to injury Those planted last spring should, if they have not since made some healthy growth, have a covering of straw or of Russia matting.

Roses and Shrubs—not perfectly hardy should be sheathed with straw or bent to the ground and covered with two or three inches of earth. In this last mentioned way Bourbons and Hoisettes may be perfectly protected.

Carnations.—The great beauty and perfume of these flowers would amply repay thrice the trouble involved in the preserve-

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tion of the plants. Layers from plants of last spring should now be perfectly established in pots. They will not withstand sudden alternations of temperature or of moisture. They may be preserved from these evils very conveniently and surely by plunging the pots half-way in earth and covering them with an inverted box, elevated on the *north side*, by a couple of bricks under its edge. If there be *mice* about, look sharp! Put into active employment cats, traps and poison. Should they get a taste of the Carnations they will not leave you a plant.

PANSIES and many other half-hardy herbaceous plants may be kept secure by a covering of leaves. These should be prevented from blowing away by means of brush-wood, or an inverted box. *

SKETCHES OF FRUIT AND FRUIT TREES.

Under this head we should like to gather from all parts of the country, west of Lake Michigan, brief and pointed statements of facts concerning Fruit and Fruit Trees. If those of our readers who have grown a variety long enough to enable them to form a judgment concerning its qualities, will devote a little time to writing on the subject, they will perform an important service to Horticulture, and add greatly to the interest of this department of our paper. The results of the experience of Fruit Growers here, do not accord with those published in the Horticultural Books and Journals of the East. While gratefully acknowledging our obligations to the sources of information, we must make up our minds to cut loose our "leading strings" and establish ourselves in an independent position. For this we must have a broad and ample basis of facts—facts of our own finding—facts acquired by reputed experiments and by close observation.—Ho! ye lovers of fruits of every name. Whether on the sea-like prairies, among the oaks of the "openings" or by the shadows of the "timber;" plant carefully, observe keenly, compare thoughtfully and—WRITE.

PEARS.—

NOTE.—In notices of fruits that have been repeatedly described, we do not think it worth while to enumerate all those peculiarities, which are so interesting in the case of what is new and rare. When such come before us, we hope to be particular enough to please the most exacting.

DOYENNE DE ETE.—The tree is a standard, planted in a stiff clayey loam; ten years old of thrifty upright growth; fifteen feet high; perfectly sound and healthy. The past season it bore some twenty pears; the previous one only seven; commenced bearing in 1851. The last crop was picked 1st August, and ripened in from three to six days thereafter. The fruit is small, but handsome, and when ripened off the tree, of excellent quality. If left on the tree *three days* too long, its quality is very much injured. Should it prove to be productive, it may be safely recommended for general cultivation.

BEURRE GOUBAULT.—On the Quince this Pear makes a handsome pyramid, if not suffered to overbear while young. It is very much inclined to this. We have five trees four years planted. One of them now six years old and but four feet high, has borne for three years, and last season produced thirty-eight pears, in a space that might be included in a cylinder twelve inches in diameter and eighteen in length.—We was well enough aware that it was "bad practice" to allow such an aggregation of fruit in so small a space. Our excuse is that we wished to see what the little thing *could* do! The fruit is of medium size (frequently above medium) sweet, melting, juicy, and sufficiently high flavored to rank as "very good." Should be taken from the tree about 1st of October. *

CURRANTS.

The fruits of the Tropics have a luscious richness, a superlative sweetness, a concentration of deliciousness not found in those of Northern climes. Pine Apples, fresh from the summit of the pyramids of massive green leaves which bear them up, are glorious; the memory of Figs, just parted from the tree and dropping nectar at the touch, is pleasant to the soul. Hamburg Grapes, black as ebony, broad-shouldered, a pound to the bunch, are superb; but before these and next to the Apple—that fruit of the people—do we exalt the CURRANTS. Don't laugh! We remember the Strawberries—McAvoy, Hovey, Boston Pine, British Queen: the flavor of these blushing beauties revives within us as we write their honored names. Charge us not with forgetting Peaches!—(though good, sooth! we might well be exercised for "that same" when the price of those imported from Illinois during the past

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season is considered.) Melocotons and Rare Ripes, should, if necessary, go to the wall to give place to the Currants. Taking (to come down from our stilts) all its good qualities into consideration, we are included to consider the fruits of more importance than any afforded us during the Summer months. Coming just after the Strawberries and containing more acidity and a more abundant juice, it seems precisely adapted to that state of the system occasioned by the intense heats of July and August. When perfectly ripe they may be used with the greatest freedom, and are very efficacious in preventing that class of disorders incident to the season of their maturity. Those who are accustomed to see on their tables, an abundant supply (say a peck per diem!) of Strawberries, will not be apt to repine if, as the season advances, their place is filled by enough and to spare of Currants. We write in praise of this fruit, in the hope of leading those who have neglected it to pay prompt attention to its cultivation. "Oh!" says one having his mind on a row of old snags, at the far side of the garden where the soil has not been disturbed by the spade for years, "I have plenty of Currants." Well! and of what sort are they? We'll be bound they are no larger than pigeon shot, and with their tough little skins so full of unmitigated "sour," that a pound of Muscovado would fail to sweeten a quart of them. We have entered a hundred gardens in the past season, and do not recollect a proper plantation of Currants among them all. If the plants were in sufficient quantity, they were in most instances unpruned bushes filled up with suckers and useless old wood. Most of us have need to begin again and at the foundation, i. e., *at the cutting*. These should be made now, (If you can obtain the true White and Red Dutch, do so by all means;) if not, the "common" sort will, with good cultivation, give you fruit nearly as fine. Make the (cuttings from the wood of the past season) about 12 inches long. Leave four or five buds at the upper end, and cut out all the rest. Thus managed they will not throw up suckers. Bury the cuttings in the open ground or cover them with earth in the cellar. Gooseberry cuttings should be treated in the same manner. We shall have more to say on this subject when the time for planting arrives.

GRAPE CULTURE AT THE WEST.

The cultivation of the grape for the purpose of converting the juice into wine is rapidly extending at the West, particularly in the valley of the Ohio. A correspondent of the New York Journal of Commerce, writing from Cincinnatti, communicates some interesting intelligence in regard to this matter. He says that this has been a bad year for the grape, owing to the unusually wet season.—Most of the vineyards suffered from the mildew and rot. Some few escaped, and produced crops of four to six hundred gallons to the acre; but the average for the whole country will scarcely exceed one hundred and fifty gallons to the acre. In 1853, some vineyards produced eight to nine hundred gallons. The writer says:

"The *quality* of the wine made this year will be very good. The usual price of the juice from the press, is 75 cents to $1 per gallon, according to quality; after the first and second fermentation, $1,00 to $1,50 per gallon. Within twenty miles around Cincinnatti, some 1500 acres are planted with the vine, of which about 1000 acres are now in bearing, and may probably produce 150,000 gallons of wine the present season. This is about a two-thirds crop for the Ohio valley. The growth of the wine business is shown by the fact that in 1845 there were 350 acres of vines in the neighborhood of Cincinnatti, and in the year 1852, about 1200. The value of the sparkling wine produced in 1851, was estimated at $175,000. In Missouri and Illinois, about 1100 acres are already planted, and the culture is rapidly increasing through the West and Southwest. Tennessee and Georgia are particularly well adapted to the growth of the Catawba grape. The Catawba is our great wine grape, and without a rival. Nearly all our vinyards are planted with the grape, which, with careful attention, produces a wine fairly comparing with the best average Rhenish and French sparkling and still wines. In Cincinnatti alone, about 200,000 bottles of sparkling Catawba and 30,000 bottles of still wines are put up annually. Of the Isabella, Schuylkill and Herbeaumont grape, a small quantity of wine is made every year, and the wine from the last named is growing into favor with many, from its resemblance to the Spanish Manzalla."

A Green Rose.—At an exhibition of flowers, which took place at the beginning of May at Mannheim, a prize was awarded for a very extraordinary floral curiosity—a green rose. The petals of the flower were green, and had somewhat the form of leaves. [Farmers' Journal.

"When will wonders cease."

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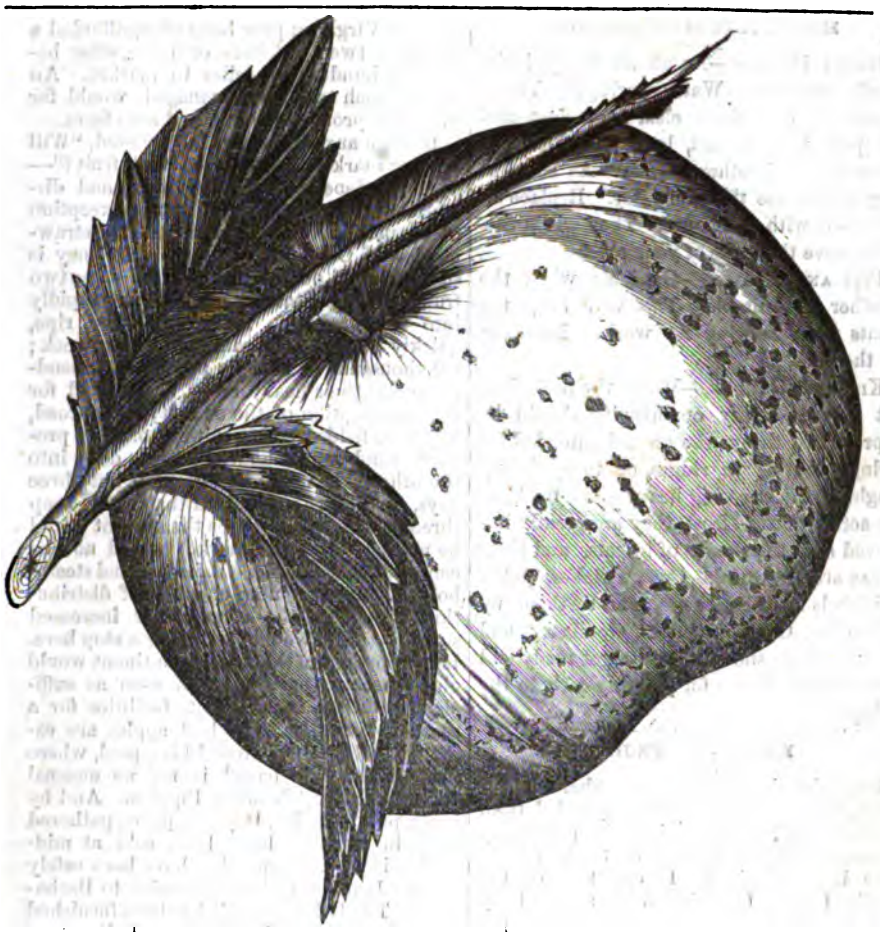

THE BELMONT APPLE.

The above cut is a correct likeness of a Wisconsin grown apple, of goodly proportions, and tempting appearance.

The Belmont, or Waxen, as it is sometimes called, is a late fall, and early winter apple; ripening from November to January.

The above specimen was raised by A. Slocum, Esq., of Whitewater; and exhibited by him, at the meeting of the Wisconsin Fruit Growers Association, held at that place on the 12th and 13th of Dec. They discussed its merits at length, and pronounced it a good variety, and recommended it for general cultivation.

It is described as follows, in the American Fruit Book, pages 177, and 178:

"BELMONT. (*Syn.* Gate, Waxen of Coxe?) Rather large, roundish conical or ovate-conical, apex usually narrow, but sometimes quite obtuse; faintly ribbed, smooth; color clear pale yellow, with sometimes a light vermillion blush; and rarely with large thinly scattered carmine dots; stalk varying from half an inch long and stout, to an inch or more long and slender; basin in conical specimens, narrow and shallow; in obtuse specimens, narrow and deep, with an obtusely ribbed rim; flesh yellowish white, compact, crisp, becoming quite tender, with a mild, rich, sub-acid, fine flavor. Leaves c enate. Early winter. A profuse bearer. Excellent in New York, Michigan, and northern and central Ohio—worthless in Cincinnati."

We propose from time to time, to give accurate illustrations of our finest home grown standard fruits; those who wish to select for cultivation, may have the better knowledge of what they choose, as much of the value of an orchard, depends upon a wise and proven selection.

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HORTICULTURAL CALENDER.

Green Houses.—Admit air freely in favorable weather. Water sparingly. Tie up plants and keep them clear from dust, and the pots from mould, look sharp for the green flys, and other insects. As soon as they appear use the fumigator. Replace all old labels with new ones. They will greatly improve the looks of your plants.

Pits and Frames.—Give air when the weather is suitable. This will keep the plants from drawing up weak. Look out for the mice.

Kitchen Garden.—While the frost does not prevent, every opportunity should be improved to throw the ground intended for spring planting in ridges, or to spade up roughly. By exposing heavy soils freely to the action of the frost, they are greatly improved and thousands of insects, and their larvae are destroyed. Cut all stakes, poles, and labels for summer use, and tie them up in bundles. Currant, Quince, Goosberry, and other cuttings should now be got ready and the soil in readiness for planting early in the spring. *

PROFITS OF FRUIT.

Examples almost without number may be given, where single trees have yielded from five to ten dollars a year in fruit, and many instances in which twenty or thirty dollars have been obtained. If one tree of the Rhode Island Greening will afford forty bushels of fruit, at a quarter of a dollar per bushel, which has often occurred, forty such trees on an acre would yield a crop worth four hundred dollars. But taking but one quarter of this amount as a low average for all seasons, and with imperfect cultivation, one hundred dollars would still be equal to the interest on fifteen hundred per acre.—Now, this estimate is based upon the price of good winter apples for the past thirty years, in our most productive districts; let a similar calculation be made with fruits rarer and of a more delicate character. Apricots, and the finer varieties of the plum, are often sold for three to six dollars per bushel; the best early peaches from one to three dollars; and pears, from hardy and productive trees, two to five bushels per tree, with good management, is a frequent crop: and on large pear trees five times this quantity. An acquaintance received eight dollars for a crop grown on two fine young cherry trees, and twenty-four dollars from four young peach trees, of only six years' growth from the bud. In Western New York, single trees of the Doyenne or Virgalieu pear have often afforded a return of twenty dollars or more, after being sent hundreds of miles to market. An acre of such trees, well managed, would far exceed in profit a five hundred acre farm.

But the anxious inquiry is suggested, "Will not our markets be surfeited with fruit?"—This will depend on the judgment and discretion of cultivators. With the exception of the peaches of Philadelphia and the strawberries of Cincinnati, a great deficiency is still felt in all our large cities. Of these two fruits, large plantations are brought rapidly into full bearing. The fruit, when ripe, quickly perishes, and cannot be kept a week; yet thousands of acres in peach trees, bending under their heavy crops, are needed for the consumption of the one city, and broad, fifty acre fields, redden with enormous products, send many hundred bushels daily into the other. If, instead of keeping but three days, sorts were now added that would keep three months, many times the amount would be needed. But the market would not be confined to large cities. Railroads and steamboats would open new channels of distribution throughout the country for increased supplies. Nor would the business stop here. Large portions of the eastern continent would gladly become purchasers, as soon as sufficient quantities should create facilities for a reasonable supply. Our best apples are eagerly bought in London and Liverpool, where nine dollars per barrel is not an unusual price for the best Newton Pippins. And by being packed in ice, Doyenne pears, gathered early in autumn, have been sold at midwinter in Calcutta, peaches have been safely sent to Jamaica, and strawberries to Barbadoes. The Baldwin apple has been furnished in good condition in the east Indies, two months after it is entirely gone in Boston.

Turpentine For Black Knot.—Mr. A. E. Porter, in a communication by him in the New England Farmer, recommends the application of spirits of turpentine, as a remedy for the Black Knot in plum trees. He says that a friend of his used it in the following manner:—He was at work in his garden and about to cut down a plum tree that was half covered with black knot. "Having," said he, "some spirits of turpentine on hand he bethought himself to make an experiment on this tree before destroying it. He cut the knots with a sharp knife down to the wood, and made a thorough application of turpentine. Months passed, the tree lived, did well and the black knots destroyed. Since then he has been very successful with this remedy and so have others who have followed his example."

Every day well spent lessens the task God has set us.

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TIMBER GROWING.

As we intimated in the December number, we propose to urge constantly upon the attention of Western farmers, the indispensable importance of cultivating forests and timber, for domestic uses. Who with half an eye, does not see that the scanty supply of timber which at first existed, in the settled portions of Wisconsin, is rapidly passing away.

The demand for fuel, fencing and building, with the wasteful manner of cutting, and stealing usually practiced has made rapid havoc to which is being extensively added, the all-devouring locomotive; under the wasting consumption of all these destructive causes, and with no coal to supply the deficiency. Where will Wisconsin be, a few years hence? if early and efficient steps are not taken, by those who own the soil, to grow timber.

Few farmers, or land owners, so far as our observation goes, seem to be sufficiently aroused, or conscious, of the importance of this subject; this may be partially owing to the newness of the country, but more to the want of forethought, on the part of the people. How many prairie farmers of ample means, are going from two to ten miles, constantly, for every stick of wood they burn, and every stick with which to drive their cattle; and paying high for it perhaps at that; and still making no effort to supply the deficiency. The extra labor, and expence of those getting timber from a distance; if employed in planting, and taking care of the rapidly growing locust; would soon supply any amount of the best kinds of timber, for every farm. We all know from our own observation, that almost every kind of locust trees are congenial to the west, and grow as rapidly as corn and with as little care.

Any man who will take the trouble of gathering the seed, which is so abundant on the shade trees, in almost every yard; and plant it in the Spring, in nursery rows upon some small corner of his farm, will, the next year, have an ample stock of trees to transplant from, for all time to come; for each tree that is taken up, will send up half a dozen new ones, from the roots left in the ground. Thus an acre of nursery is ample to stock a hundred acres of timber lands, in a brief period.

The growth of the locust is so rapid under ordinary circumstances, that five years from the seed will render it useful for many purposes; and seven to ten years' growth will supply every ordinary need of the farmer. We would ask then, what a man can do to add so much to the value, convenience and beauty of his farm? A hundred dollars invested in this way, and all in labor, at odd times, is sure to add at least a thousand dollars to the value of any farm, in ten years. Here is a hundred per cent. per annum and not cheated out of any poor neighbor either; but actually added to the real wealth of the world. Who, among the philanthropic, enterprising, or money loving of our farmers, will try it—not sometime in the future but next Spring. We hope there are a thousand at least; and all who propose to, must go about collecting the seed as early as possible; as it is constantly rattling off from the trees, although some hangs on till Spring. We will give ample and minute instruction, as to the best modes of culture, before the time of planting: and would say to all, collect your seed from the trees abounding in almost every village, and country house front yards.

We shall in subsequent articles, refer to other kinds of timber, well worthy of cultivation, and go more fully into detail, than in the present case, which is intended more as an introductory, than a set and scientific article.

We have bespoken a series of articles on the subject, from one of the most philosophic and reliable pens in the State, and hope to lay them before our readers early during the coming year. In a word we do not mean to drop this subject, until it is thoroughly understood, and not until it becomes as much the business of the farmer of a timberless farm, as planting corn.

THE CHINK BUG.

The Chink Bug spoken of in the December number of the Wisconsin Farmer by Mr. A. Beouse is known in the books under the classical name of *Lygæus leucopterus*, of Say. It is one of the small order of insects named Hemiptera, or half-wings, which includes those species having four wings, of which the two front ones are coriaceous, or of a leathery texture at the base, and thin or membranous at the extremities; the body depressed or flattened; the antennæ or feelers elongated and thread-like; the mouth consisting of a horny beak adapted for sucking the juices of plants; the larvæ and pupæ active, (much too active for wheat-growers!) resembling the mature insect, but without wings. To this order of insects belong the Bugs, Locusts, Plant-lice, Bark-lice, &c.

The Hemipters are quite numerous, and vary much in their structure and habits, so that naturalists have divided them into several families: one of these is called *Lygæadæ* or insects resembling the chink bug. These animals have long antennæ, with four joints inserted on a line from the eyes to the base of the rostrum or beak; the body is narrow; the membranous portion of the upper wings with about five nervures; and the tarsi (feet) three-jointed. Most of the insects of this family are small—some of them are marked with bright colors.

It appears to be the larvæ of the chink bug that does the mischief to the wheat. This, according to Mr. Beouse is only about an eighth of an inch in length, and when fully grown, of a lead color. In common with many other insects of this order it emits a disagreeable effluvia; it is active in its habits and appears in great numbers. The food of the larvæ appears to be the juice and inner portions of the wheat stalks and leaves, as only a thin white skeleton is left after they have satisfied their voracious appetite.

The ravages of the Lygæus were first noticed in the Western States about the year 1845, when the insect was described in the Prairie Farmer. The upper wings are white, marked with an oval black spot on a central line; the body black and downy; the beak, legs, antennæ at the base, and hinder edge of the thorax reddish-yellow; length three-twentieths of an inch; the young bright red, changing to brown and then black, but always marked with a white band across the back. It is possible that there may be several species of insects included under the name of chink bug—as often happens where so little is positively known of the nature of these little mischevous things.

It seems to be considered the duty of "some skilled entomologist" to furnish information in regard to this new pest. But who is there among us that can afford to devote his time to the investigation of such ubjects without compensation; the previous study an labor necessary to acquire skill in this department must be very considerable, and is therefore deserving of liberal reward when brought into requisition for the benefit of others. Why should the naturalist work for nothing any more than the lawyer, the doctor, the mechanic, or farmer. It is true that Etnomologists should make known the results of their patient and persevering observation and study; but it is equally true that they should be paid for it. Let the State Agricultural Society take up this important matter and appoint some suitably qualified person to make thorough and continued investigations of this kind and report the results from time to time, and the work will be done. I. A. L.

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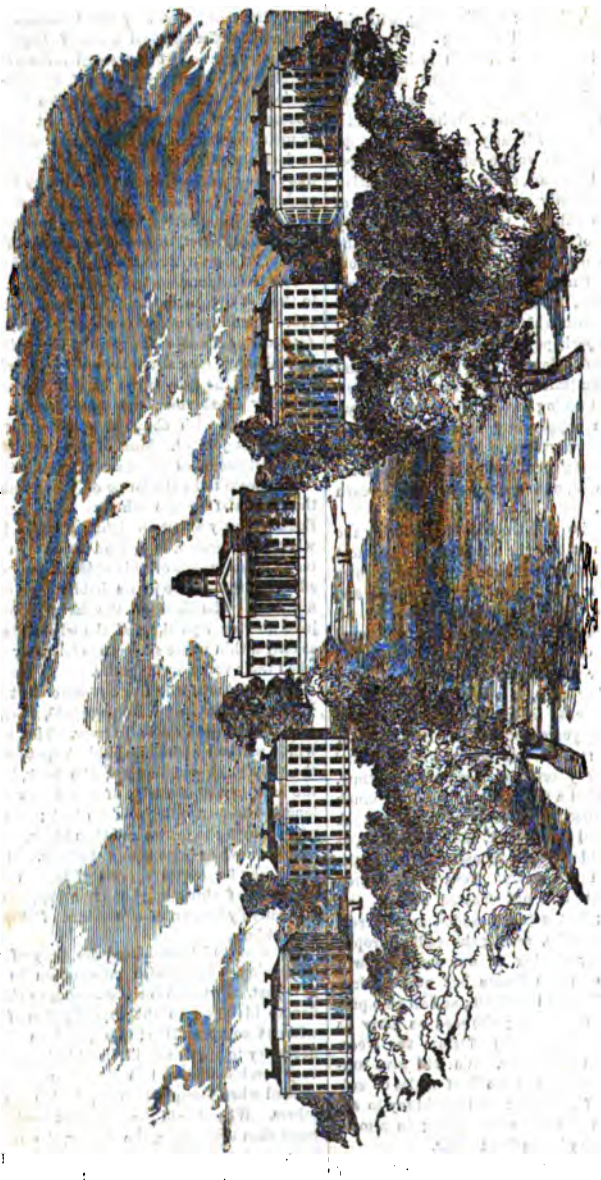

WISCONSIN STATE UNIVERSITY.

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EDUCATIONAL.

Under this head, we propose to occupy some space in each number. And as first and foremost in that behalf, we refer to the State University, as the natural and proper head of our Educational System.

On the opposite page we present a fine view of this Institution, as designed and partially completed. If not new to all, it may be to many of our readers; all of whom are deeply interested in its progress and prosperity.

Its location is one of the most beautiful and healthy in America. Situated on an elevated site, just on the western border of Madison, it commands a splendid view, of the most varied and charming scenery imaginable; which to be fully appreciated needs to be seen. This institution is liberally endowed, and is intended to afford to as many of the enterprising youth of the State as wish it, the opportunity of a thorough and substantial classical and scientific education, free of all charge for tuition. (Pity equal provision was not made for the girls.)

It is indeed a noble plan, and is being nobly carried out. How many of the parents, or young men of the state appreciate it? The day is perhaps not far distant when five hundred students will annually tread its ample courts, and profit from the instruction of its able faculty; let all then feel an interest in its affairs, and take a pride in its onward progress in usefulness. We have not space in the present number, to enter into the details of its organization and management, except to say in general terms, that it is ample and complete, and such as we can cheerfully and fully commend to all who wish to acquire a thorough and complete education, for a moderate expenditure of money, and under influences of an elevating and refining moral tendency. The State University is of such vital interest to the enterprising farm boys of Wisconsin, that we shall not unfrequently refer to it hereafter, to the end that its importance may be fully appreciated, and its rich benefits enjoyed by the rising and toiling youth of the State.

We understand that Professor Carr, who is soon to be installed in the chairs of Chemistry and Natural History, in the State University, is a noted agricultural chemist; and will organize a class in Agricultural Chemistry, at an early day. Thus adding a new, and highly important feature to the instructional agencies at the University. We hail this step with more than ordinary satisfaction, as it seems to us a step in the right direction.

When we reflect that everything in this inland State, depends upon the products of the soil for its success, we would naturally conclude that a subject of such fundamental importance, would be foremost in our schools, and attract the attention of the best educationists of the day.

Such doubtless will be the case, as the practical and utilitarian spirit of the age, progresses; the substantial interests of society will take precedence of matters obsolete or fanciful.

For more definite information, terms of tuition, &c., of this institution, see their circular in the advertising pages of the Farmer.

A Poor Boy now Governor.—The new Governor, of California, J. Neeley Johnson, was born in a squattier's cabin in Indiana.—In 1849 he went to California, where his first occupation was that of driving a mule team to the mines. He next took the practice of law and has since then been a rising man.—At the age of thirty years and one month he is Governor of a large and thriving State.

FEMALE HEALTH AND EDUCATION.

The following paragraphs are extracted from Miss Beecher's new work:

The work that Providence has appointed for women in the various details of domestic life, is just that which *if properly apportioned*, is fitted to her peculiar organization. If all the female members of a family divided all the labors of the cook, the nurse, the laundress, and the seamstress, so that each should have four or five hours a day of alternating light and heavy work, it would exercise every muscle in the body, and at the same time interest and exercise the mind. Then the remaining time could be safely given to intellectual, social and benevolent pursuits and enjoyments.

But no such division is made. One portion of the women have all the exercise of the *nerves of motion*, and another have all the *brain work*, while they thus grow up deficient and deformed, either intellectually or physically, or both. And so American women every year become more and more nevous, sickly and miserable, while they are bringing into existence a feeble, delicate or deformed offspring.

We are convinced that this statement, terrific as it is, is no exaggeration, and may be confirmed by thousands of cases very near us, and not among those who are called ignorant, or thoughtless, or unkind. It seems to me that the education of daughters is more badly managed than anything in American society, and in some respects the position that is regarded as the most favored is exactly the opposite. If any enemy of the human race who wished to destroy the hope of the nation, could devise any more effectual method of breaking down the health of girls than the method pursued by our current fashions, he must be gifted with superhuman ingenuity.

Teaching.—The love of teaching is generally associated with the capacity for it, but the converse does not generally hold true.—Men generally teach badly when they attempt to teach too much, or when they do not duly prepare their lessons. Presence of mind and that self-confidence which is based on self-knowledge are essential elements in a good teacher's character. An earnest man imbued with the love of children, is rarely a bad teacher.

There is a word—the word of words,
To which a charm is lent,
That keeps the universe alive,
This word—Encouragement;
'Tis like a main-spring to the world,
That, with a sovereign sway,
Whene'er the ball would cease its course,
Impels it on its way.

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MISCELLANEOUS.

BEAUTIFY YOUR HOME.

Every man should do his best to own a home. The first money which he can spare ought to be invested in a dwelling, where his family can live permanently. Viewed as a matter of economy, that is important, not only because he can ordinarily build more cheaply than he can rent, but because of the expense caused by frequent change of residence. A man who early in life builds a home for himself and family, will save some thousands of dollars in the course of twenty years, besides avoiding the inconvenience and trouble of removals. Apart from this, there is something agreeable to our better nature in having a home that we can call our own. It is a form of property that is more than property. It speaks to the heart, enlists the sentiments, and ennobles the possessor. The associations that spring up around it, as the birthplace of children—as the scene of life's holiest emotions—as the sanctuary where the spirit cherishes its purest thoughts, are sure as all value; and whenever their influence is exerted, the moral sensibilities are improved and exalted. The greater part of our happiness of to-day is increased by the place where we were happy on yesterday, and that, insensibly, scenes and circumstances gather up a store of blessedness for the weary hours of the future! On this account we should do all in our power to make home attractive. Not only should we cultivate such tempers as serve to render its intercourse amiable and affectionate, but we should strive to adorn it with those charms which good sense and refinement so easily impart to it. We say easily, for there are persons who think that a home can not be beautified without a considerable outlay of money.—Such people are in error. It costs little to have a neat flower-garden, and to surround your dwelling with those simple beauties which delight the eye far more than expensive objects. If you will let the sunshine and dew adorn your yard, they will do more for you than any artist. Nature delights in beauty. She loves to brighten the landscape and make it agreeable to the eye. She hangs the ivy around the ruin, and over the stump of a withered tree twines the graceful vine. A thousand arts she practices to animate the senses and please the mind. Follow her example, and do for yourself what she is always laboring to do for you. Beauty is a divine instrumentality. It is one of God's chosen forms of power. We never see creative energy without something beyond mere existence, and hence the whole universe is a teacher and inspirer of beauty. Every man was born to be an artist so far as the appreciation and enjoyment of beauty are concerned, and he robs himself of one of the precious gifts of his being if he fails to fulfill this beneficient purpose of his creation.

[Southern Times.

MEANNESS DOES NOT PAY.

There is no greater mistake that a business man makes than to be mean in his business. Always taking the half cent for the dollars he has made and is making. Such a policy is very much like the farmer's, who sows three pecks of seed when he ought to have sown five, and as a recompense for the leanness of his soul, only gets ten when he ought to have got fifteen bushels of grain. Everybody has heard of the proverb of "penny wise and pound foolish." A liberal expenditure in the way of business is always sure to be a capital investment. There are people in the world who are short-sighted enough to believe that their interest can be best promoted by grasping and clinging to all they can get, and never letting a cent slip through their fingers. As a general thing, it will be found, other things being equal, that he who is most liberal is most successful in business. Of course we do not mean it to be inferred that a man should be a prodigal in his expenditure; but that he should show to his customers, if he is a trader, or those whom he may be doing any kind of business with, that, in all his transactions, as well as social relations, he acknowledges the everlasting fact that there can be no permanent prosperity or good feeling in a community where benefits are not reciprocal.

[Hunt's Merchant's Magazine.

A PETRIFACTION, AND NATURAL DAGUERREOTYPE ON STONE.

The editor of the Oquaqua Spectator, Ill., it is stated, has two remarkable curiosities in his cabinet. One of them, he says, appears to be a petrified ham, so perfect in form that even the skin preserves its distinctness where the knife of the trimmer has rounded the edges. The other specimen is a stone containing a photographic impress of a beautiful landscape. It is about four inches long by two inches in width; the picture represents, in their true colors, a bluff or bank of yellow clay, the meandering line of a creek lined with willows and cotton woods, and a spring crowned with a large tree. This landscape is the correct representation of a view in Warren County, Ill. Mr. Patterson, the editor, attributes the picture to the action of electricity during a thunder storm, while the image had been reflected on the surface of the stone.

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AN ELOQUENT EXTRACT.

We quote the following paragraph from the address delivered by Hon. J. W. Miller before the New Jersey Agricultural Society, at Camden:

"The epochs through which our globe has passed have been characterized by the names of various metals. There has been the golden age, the silver age, and the iron age. The era in which we live might be called with propriety the quicksilver age; for everything seems to be on the move. Each individual particle quivers in trembling haste to run upon its neighbor, and thus form a massive body, which, when once formed, rolls into some crooked direction which neither mathematics could calculate, nor wisdom foretell. Politics, religion, manufactures, navigation, every science, every art, seems pregnant with revolution and heaving into new birth.—Even agriculture, the oldest and most universal of human pursuits, seems inspired by the genius of innovation. Let not, therefore, the old farmer, surrounded by his broad acres, suppose that he can entrench himself behind the natural advantages of soil and location, and defy the inroads of modern improvement; for before he is aware, some invention of art, or discovery in science, may deprive him of his natural superiority. Let him remember that in these days of marvellous invention, soils may be manufactured, and lands transmuted; that under the influence of new fertilizing agents, and an improved mode of cultivation, neglected sand plains and barren hills are brought into successful competition with the richest alluvial lands; and wheat and corn, vegetables and fruits are made to flourish, where neither grass nor grain ever grew before!"

EVIL SPEAKING.

The following anecdote is related of the late excellent J. J. Gurney, by one who, as a child, was often one of his family circle:

One night—I remember it well—I received a severe lesson on the sin of evil speaking. Severe I thought it then, and my heart rose in childish anger against him who gave it; but I had not lived long enough in the world to know how much mischief a child's tho'tless talk may do, and how often it happens that great talkers run off the straight line of truth. I was talking very fast about some female relative, who did not stand very high in my esteem, and was about to speak further of her failings of temper. In a few moments my eyes caught a look of such calm and steady displeasure that I stopped short. There was no mistaking the meaning of that dark, speaking eye. It brought the color to my face, and confusion and shame to my heart. I was silent for a few moments, when Joseph John Gurney asked, very gravely, "Dost thou not know any good thing to tell us of her?"

I did not answer, and the question was more seriously asked, "Think; is there nothing good thou canst tell us of her?"

"O, yes; I know some good things, certainly; but—"

"Would it not have been better, then, to relate these good things, than to have told us that which must lower her in our esteem?" Since there *is* good to relate, would it not be kinder to be silent on the evil? 'Charity rejoiceth not in iniquity,' thou knowest."

It was our custom every morning, for Miss Gurney and any little visitor she might have with her, to go, before breakfast, into the room next to her father's dressing-room, and repeat some portions of the Scripture. On the following morning I was desired to read in the 13th chapter of 1st Corinthians, and afterwards to commit a portion of it to memory. There was no comment made on what I read; it was not necessary. The reproof was felt, even to the shedding of tears; but the kind voice and silent kiss soon spoke love and peace, and I was comforted. "A word spoken in season, how is it!"

Every one who visited his house must have been impressed with the superior tone of conversation there, with the absence of scandal and small-talk; and when persons, rather than things, were a little too much in the discourse of the juniors, how ingeniously, and yet how kindly, has the subject been put aside, and some other matter of innocent interest introduced in its stead!

ORIGIN OF FIRES.

"The origin of fires in London," says the Firemen's Gazette, "has now been recorded for about twenty years. And it has been observed that not only the most frequent causes from year to year have kept the same ratio, but even those which are so peculiar that one would never expect to hear from them again. From the list we copy a few:

Curtains	2,511	Smoking Tobacco	166
Candles	1,178	Reading in bed	22
Flues	1,555	Sewing in ditto	4
Gas	932	Smoking in ditto	2
Stoves	494	Spontaneous combus'n	42
Incendiarism	89	Cat	19
Carelessness	100	Dog	6
Intoxication	80	Clothes-horse upset by monkey	1
Lucifers	80	Lightning	8
Children playing with lucifers	45	High tide	1

An inspection of the above list will disclose a deal of curious information. Who would have supposed curtains to be so dangerous? And since they can be so easily dispensed with, without injury to comfort or taste, would not common prudence seem to require it? Reading in bed seems to be seven times as dangerous as smoking—and a cat is more than three times as hazardous as a dog."

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DON'T DEPEND ON "FATHER."

Stand up here, young man, and let me talk to you; you have trusted alone to the contents of "father's purse," or his fair fame, for his influence or success in business. Think you that "father" has attained to eminence in his profession, but by unwearied industry? or that he has amassed a fortune honestly, without energy and activity? You should know that the faculty requisite for the acquiring of fame or fortune, is essential to, nay inseparable from the retaining of either of these. Suppose "father" has the "rocks" in abundance; if you never earned anything for him, you have no more business with these "rocks" than a gosling has with a tortoise! and if he allows you to meddle with them, to the detriment of your own industry, he perpetrates untold mischief. And if the old gentleman is lavish of his cash towards you, while he allows you to while away your time, you'd better leave him; yes, run away sooner than be an imbecile, or something worse, through so corrupting an influence. Sooner or later you must learn to rely on your own resources, or you will not be anybody.

If you have become idle, if you have eaten father's bread and butter, and smoked father's cigars, cut a swell in father's buggy, and tried to put on father's influence and reputation, you might far better have been a poor canal boy, the son of a chimney sweep, or a boot-black—and, indeed, we would not swap with you the situation of a poor, half-starved, motherless calf! Miserable objects you are that depend entirely on parents, playing gentleman (dandy loafers.) What in the name of common sense are you thinking of? Wake up, there! Go to work, either with your hands or your brains, or both, and be something! Don't merely have it to boast of that you have grown up in "father's" house—that you have vegetated as other green horns? but let folks know that you count one!

Look about you, you well dressed, smooth-faced, do nothing drones. Who have worth and influence in society? Are they those that have climbed their way to their position by their own industry and energy? True, the old gentleman's funds, or personal influences may secure the forms of respect, but let him lose his property, or die, and what are you? A miserable fledgling—a bunch of flesh and bones that needs to be taken care of!

Again we say, wake up—get up in the morning—turn round at least twice before breakfast—help the old man—give him a generous lift in business—learn how to take the lead, and not depend forever on being led, and you have no idea how the discipline will benefit you. Do this, and our word for it, you will seem to breathe a new atmosphere, possess a new frame, tread a new earth, wake to a new destiny—and then you may begin to aspire to manhood.

EVERY FAMILY
SHOULD HAVE AN AGRICULTURAL PAPER.

It is worth more than it costs simply for educational purposes. Parents have hardly a right to deprive their families of its advantages in these times. Children will learn more, as they go to and from school, to drive the cows to pasture, or pick berries by the way, if their observation is quickened by what they hear their parents read or talk over from the agricultural papers; and when they form habits of reading for themselves, such reading is both safe and useful. Reader, if your neighbor has no agricultural paper, persuade him to take one. Even if he is poor, he can better afford to take one than to do without it: for if he takes one, his children will be likely to be better off—to make a good home for themselves, and it may be for him in old age. Not all will have farms; but all will need to know something of the garden and orchard at least; and we advise no parent, who feels that he may sometime be dependent upon his children, to bring them up without the means of instruction in rural economy. It should be regarded as essential in the education of any child, male or female.

[American Cotton Planter.

OBEY ORDERS IF YOU BREAK OWNERS.—The business manager of one of the Cincinnatti Dailies, who is very strict in his rules, and above all requires those under him to "obey orders if they break owners," purchased a turkey a few days since, and being "short" gave the countryman the following note, and requested him to present it to the clerk in the counting room of his office:

"Pay the bearer a dollar. Be sure and tie his legs or he will get away."

The dollar was paid, and as the clerk could not construe the note to mean anything else than to tie the legs of the bearer, he proceeded to carry the order into effect. Luckily the business man soon returned and released the turkey vender, who was almost frightened out of his wits.

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BRIEF HISTORY OF GUANO.

Guano, as most people understand, is imported from the Pacific—mostly of the Chincha group, off the coast of Peru, and under the dominion of that government.

Its sale is made a monopoly, and the avails to a great extent, go to pay the British holders of Peruvian Government bonds, giving them to all intents and purposes, a lien upon the profits of a treasure intrinsically more valuable than the gold mines of California. There are deposits of this unsurpassed fertilizer, in some places, to the depth of sixty or seventy feet, and over large extents of surface. The guano fields are generally conceded to be the excrements of aquatic fowls, which live and nestle in great numbers around the Islands. They seem designed by nature to rescue, at least in part, that untold amount of fertilising material which every river and brooklet is rolling into the sea. The wash of alluvial soils, the floating refuse of the field and forest, and above all, the wasted materials of great cities, are constantly being carried by the tidal currents out to sea. These, to a certain extent at least, go to nourish, directly or indirectly, submarine vegetable and animal life, which in turn goes to feed the birds, whose excréments at our day are brought away by ship-loads from the Chincha Islands.

The bird is a beautifully arranged chemical laboratory, fitted up to perform a single operation, viz: to take the fish as food, burn out the carbon by means of its respiratory functions, and deposit the remainder in the shape of an incomparable fertilizer. But how many ages have these depositions of seventy feet in thickness been accumulating?

There are at the present day countless numbers of the birds resting upon the islands at night; but, according to Baron Humbolt, the excrements of the birds for the space of three centuries, would not form a strategem of over one-third of an inch in thickness. By an easy mathematical calculation, it will be seen, that at this rate of deposition, it would take seven thousand five hundred and sixty centuries, or seven hundred and fifty-six thousand years, to form the deepest guano bed. Such a calculation carries us back well on towards a former geological period, and proves one, and perhaps both, of two things—first, that in past ages an infinitely greater number of these birds hovered over the islands; and secondly, that the material world existed at a period long anterior to its fitness as the abode of man. The length of man's existence is infinitesimal, compared with such a cycle of years; and the facts recorded on every leaf of the material universe, ought. if it does not, to teach us humility. That a little bird, whose individual existence is as nothing, should, in its united action, produce the means of bringing back to an active fertility, whole provinces of waste and barren lands, is one of a thousand facts to show how comparatively insignificant agencies in the economy of nature, produce momentous results.

BEWARE OF OFFICE.

When a wild animal once tastes human flesh, nothing can ever after, says Buffon, dissuade him from human slaughter. When a politician once obtains a public office, no persuasion can ever induce him to go to work—at anything but a nomination for another and another, during the term of his natural existence.

If you want to spoil a good citizen for ten years, secure him a berth in the custom-house. He will never be socially a well man afterward. Send him to Congress and you ruin him for life. He may carry around placards and tickets at the polls, accept a subordinate situation in the police, or run errands for the doorkeeper of a political meeting-house, but he will never, never have independence enough to emancipate himself from his morbid appetite for the "spoils," and go to work like an honest man and a Christian.

[Sunday Times.

WOOD LAND.

Fifteen acres of wood and timber land will furnish a farmer his ordinary timber and wood for two fires. *Ten* cords of wood suffice for any man to keep two fires the year round, provided he has tight rooms and good stoves. We have kept two fires since the first of November, in two large rooms, and have not yet burned three cords of wood, and we can assure you that we like a good comfortable fire. The farmer should commence on one side of his lot, and cut the wood clean as he goes. In this manner the young shoots come up alike, as they receive the sun alike. Now say there are thirty cords of wood to an acre; if he cuts ten

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cords of wood a year, it will take him three years to cut off the wood of a single acre, and it will take him forty-five years to cut the wood off from his lot of fifteen acres. At the end of forty-five years, he may go back to the first acre he cut, and cut thirty cords to the acre. On our ordinary upland, wood will grow to thirty cords to the acre in thirty years.

Thirty-four years since, we recollect of assisting in clearing fourteen acres of wood land, and getting the same into winter rye. After the crop of winter rye was taken, it was pastured for a year or two, and then suffered to grow up. The growth was white oak, yellow oak, red oak, chestnut and maple. Seven years ssnce, that *same rye field* was cut over, and there was not a single acre of it but produced thirty cords to the acre! And this in twenty-seven years!

[Anonymous.

HYDROPHOBIA.

It is said that in every instance where a person is bitten by a mad dog, small postules make their appearance sooner or later on the under side of the tongue, and generally in from six to nine days. These postules must be opened with a sharp pointed instrument, as they are too tough to break of themselves: and the matter must be discharged and spit out, or it will be re absorbed, which reabsorption is said to cause the paroxysms termed hydrophobia. The above is the substance of a communication which appeared in the New Orleans Tropic some years since, from the pen of a Southern physician, who says:

"In 1832 I was called to visit a negro woman who had been bitten by a mad dog and by pursuing the treatment here laid down I was successful in curing her. This course is the same that was recommended by Professor Marochiti, of Moscow, in 1820 and proved effectual, and my first intimation of this mode was from an English magazine published forty years ago, containing a communication from a gentleman recently returned from Tartary, where mad dogs are common and this method of treatment usual and successful.

TYPES OF HARD METAL.

The Middlesex, Mass., *Journal*, states that Mr. Samuel Weed, of that place, has invented a machine for making types out of copper, iron, brass, &c. Many attempts have been before made to do the same thing, both in this country and Europe, but without practical success, on account of the expense of production. A successful improvement of this kind would confer vast benefits to the art of printing. At present, types are cast in soft metal, and they soon wear out.

EXPETIMENT IN FEEDING SHEEP.

Last winter, having a good assortment and liberal supply of roots on hand, and having purchased a flock of long-wooled native sheep, I determined on making an experiment for the purpose of testing the relative, or comparitive value of the several kinds of vegetables in wintering these animals.—Among the roots there were the ruta-baga turnip; the carrot and the beet, but the latter was not used in consequence of the animals refusing to partake of them, except upon the compulsion of the sharpest hunger.—The plan adopted was as follows:

Three sheep were confined in a yard, in which there was a close shed for feeding, with plenty of water supplied from a cistern. Three more were placed in a similar enclosure, the fixtures of which were in every respect precisely the same, and that there might be no discrepancy whatever in the management of the two parcels, even their water was supplied from the same source.—All the animals were of the same age, and nearly of the same weight. In the morning chopped ruta-baga was given to the sheep in one pen, and chopped carrots to those in the other. This feed was regularly repeated at noon, and again at sundown; the quantity allowed each animal being one peck (by weight) of each. Salt and common house ashes were kept *constantly* in both apartments, mixed in the proportions of one of the former to three of the latter. Good clean leaves from the woods were scattered daily over the shed bottoms, and a few handsful of fine clover hay kept by them to supply the cud.

The experiment commenced on the 12th of November, and was brought to a final close on the 12th of the ensuing March.—Both sets did remarkably well, as indeed might be expected from the careful and systematic manner in which they were tended and fed; but those kept on *carrots*, gained each 8 3-4 pounds more than those kept on ruta-bagas. In April the six sheep produced six lambs—fine, healthy ones, which have grown to maturity, and are by far the most valuable animals to be found in the flocks to which they belong. If the above is worth publishing, it is at your service.

[Germantown Telegraph.

IMPROVED MARKING INK.—Mix 11 parts (by weight) nitrate of silver, 22 of liquid ammonia, 22 crystalline carbonate of soda, 50 gum arabic, 2 of sap green, and 13 of distilled water. The linen printed must be exposed to the sun or pressed with a hot iron until the letters no longer increase in blackness. [London Artisan.

God punishes in this life to do good.

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PLOWING BY STEAM.

We find a report in the American Farmer, of a committee appointed to test the merits of a steam plow, invented by Mr. OBED HUSSEY, who is known to be one of the original inventors of the Mowing Machine. His steam plow is called the "Locomotive Steam Plowing Machine," and was put in operation during the late Fair of the Maryland State Agricultural Society. It was attached to three large-sized hand plows, by log chains, each plow being managed by a separate plow man. The movement was about equal to that of a quick walking horse, and—the committee say—

"The ground was thoroughly broken to a depth varying from seven to fourteen inches, and an average width of fourteen inches to each plow. The engine proceeded across the entire length of the area inside the horse track, being a distance of about two hundred yards, encountering a hard road bed and several large stones, without any diminution of speed. The power required to perform the same amount of labor was estimated by the plowmen at that of sixteen horses. It was followed by a dense crowd of spectators, who were attracted from all parts of the grounds to witness so novel and interesting an exhibition. Three cheers which made the welkin ring proclaimed the triumph of this noble effort of genius. The crowd were then requested to retire sufficiently to allow the committee to view the operation, when the engine was turned short round and plowed back to the place of beginning; a right hand plow was then substituted for the left hand one, and the engine traversed the ground a third time, passing close along the edge of the ground previously plowed. It is proper to remark that the engine was exhibited by the inventor merely to show the power of draught and the facility of backing and turning in any direction. The ground had been much trampled during the exhibition, and at one end there was a considerable ascent. The plows were all so far apart that each one had to break a separate furrow."

The committee express, in the most emphatic terms, their unanimous opinion of the importance of this first successful attempt to construct a steam plowing engine, and regard it as the first step in a great revolution in prairie farming. Mr. HUSSEY is an ingenious man, and has devoted the greater portion of his useful life to the promotion of agriculture. We hope that his efforts will be fully appreciated, and that he will reap that pecuniary reward which is eminently his due.

ICE HOUSES.

There are few farms, of any size, but which will afford facilities for gathering a crop of ice during the winter; or, perhaps more properly speaking, where the occupants of which cannot obtain in the vicinity sufficient to fill a good sized ice-house. There are also few structures about a farm, that will prove more valuable to a farmer, as a matter of interest, and to his family as a matter of luxury, than an abundance of ice in the warm season. A house will cost, when its real value is considered, a very trifling amount, as it can be constructed mostly by the labor connected with the farm, with the help of a carpenter; and the filling of it is done at a season when the duties of the farm are light. All ice-houses, and especially small ones, are better constructed under ground. There should be a wooden frame-work, with double boarding all round, and with a space of some six or eight inches between, filled with tan, or cut straw well packed in; there should also be a double roof, admitting the free circulation of air between them, as well as a double door. Clean straw should be put in the bottom and along the sides, when filling it with ice. The ice would keep much better if sawed in blocks of one size and packed as bricks are piled. None but pure solid ice should be taken, if it can be obtained; and the lower the temperature is when cut, the longer the ice will keep. Even as a family comfort, no farmer should be without an ice-house, and once having it, he would find it indispensable.

ORIGIN OF RAILROADS.—Railroads, or roads laid with bars for the passage of coal wagons, were used in England as early as 1650. The first rails were of wood; in 1760 they were shod with iron. Cast iron rails were in 1765, and wrought iron rails in 1805. In 1804, the first engine to run upon a railroad was made by Richard Trenthick, of England. In 1811, Blenkinosp, of England, applied a rack rail along the track, and worked the engine by a spar wheel gearing into the rack.

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FAST YOUNG MEN.

We have meditated much upon this singular class of our fellow-creatures. Their creed is, that it is a sign of superior understanding for a man to make a fool of himself. Hence, though they are bad enough in reality, they affect to be a great deal worse than they are. They assume vices though they have them not, and toil after wickedness as philosophers toil after truth. What throes of anguish they endure in childhood in learning to smoke! With what fortitude they bear up against the nausea of early drink! What pains they take in acquiring the slang of their set! How laboriously they try experiments in disfiguring their persons until they have attained the precise ugliness of costume demanded by the public opinion of the body to which they belong! How freely they waste in the evening what they have worked all day to earn! How resolutely they deny themselves every rational gratification in order to procure irrational! With what a fine nonchalance they sacrifice all their future possibilities of well-doing and well-being! All because they think it is something *great* to be a perfect fool.

And yet we have some charity for these deluded creatures. It was not altogether their fault that they adopted a faith so extraordinary. Rowdies, we have observed, abound most where those sects have most power that forbid or discourage innocent pleasures. All the sons of George III. were fast young men; for George III. was a narrow-minded bigot, a bigot of routine, who made his palace the abode of dullness and tedium, and who kept his children in an unnatural condition of restraint. It is notorious, also, that the sons ef clergymen are apt to be of the fast species. And there is a City, not far off, which is celebrated for two things—quakerism and rowdyism. In Germany, where there are no bigots, there are no fast young men. In France, we believe, there are few. In American families, where the sportive impulses of boyhood are allowed free scope as long as they are indulged innocently, and where the young are not nauseated with moral instruction and religious observances, and where the youthful mind is awakened and fed with nutriment suitable to it, where genial books are on the table—in such families fast young men are not produced. Where we see a man who makes it a sin to dance or to take a walk on Sunday, we see a man whose children are almost sure to wring his heart by their dissipation and disobedience. Rowdyism, we maintain, is something unnatural. It is the *recoil* from sanctimony. If there were no mock saints, there were no mock *roues*. Bigotry and rowdyism are inseparable, for the latter is—to adopt a mathematical term—the *complement* of the former.

Know this, O teachers of youth, that if you persuade a boy that a certain innocent act is wrong, and that boy goes and does the act so stigmatized, he is as much demoralized as though the act were really wrong; and every time he does it, he sinks in the mhral scale, and prepares himself to do the worst acts. That is the process by which our fast young men are made.

To these remarks we will add a little personal experience. The writer of these paragraphs passed the greater part of his youth at a grimly sanctimonious boarding-school. It was avowedly a sectarian institution, and every effort was made to inculcate sectarian doctrines. There were long prayers and Bible-readings three times a day. On Sundays, the pupils went to church twice, had severe drilling in catechism, Bible, and moral philosophy, and in the evening a long prayer from the principal of the school. On feast and fast days, there was extra church going, and additional prayers at home. On Sundays all play was prohibited, and no books were allowed to be read except such as no boy *will* read voluntarily. The teachers, who worked this system, were well-meaning enough, though excessively stupid—partly from nature, and chiefly from college. Well—what moral results were produced!

We solemnly aver, that in no community of which we have since had any knowledge was there so low a moral tone, so much outrageous wickedness, so little regard for the rights of others, such habitual nastiness of conversation, such a proclivity for all that is vulgar, hateful, suicidal, such egregious conceit and gross irreverence as in that religious boarding-school. In two days we learned more evil in that school than in all our previous life. *The* subject of conversation was one which cannot here be named. The vilest books were secretly circulated. The constant source of amusement was to

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burlesque the minister and the individual who read prayers. To steal the produce of the neighboring farmers—poor. hard-working men, most of them—was accounted a great glory. No man's fruit, within five miles of that religious institution, was safe. Every boy above the age of fourteen smoked —not because he liked it, but because it was against the rules, and required a great deal of trouble to escape detection. The delight of the older boys was to go far into the woods, make a fire, cook a stolen goose, concoct a gallon of whiskey punch, drink four glasses each, have a great debauch generally, and get home without showing it. Nearly every one of those boys, when he left school and went home to New York to live, became a very fast young man. The letters written back to their late companions were chiefly devoted to the recital of low adventures in the places where no decent young man would *boast* of having been. The few who escaped from the contagious vileness of this school not wholly debased, were those *who had a passion for reading, and who became sincerely interested in their studies.*

Is our experience peculiar? Not at all. We have made inquiries on that point. We are convinced that there is no school in this land, conducted on what we may call sanctimonious principles, in which the tone of moral feeling, and moral conduct, too, is not wretchedly low—in wh ch it is not thought to be *something great* to be dissipated, to despise authority, and to insult superiors. Hundreds of our readers know that what we are saying on this subject is true, though, perhaps, they may not all like to have it said. Every one has his tale to tell of college tricks, but it occurs to few that the prevalence of those tricks argues in the students who perform them a most pit'able poverty of mind, as well as a low and vulgar tone of feeling.

But we have wandered somewhat from our original purpose, which was merely to remind those who have to do with the training of boys, that long-faced sanctimony and bare-faced rowdyism have the closest possible relationship—that of Cause and Effect. [Life Illustrated.

PURE AIR.

In about two and a half minutes, all the blood contained in the human system, amounting to nearly three gallons, traverses the respiratory surface. Every one, then, who breathes an impure atmosphere two and a half minutes, has every particle of his blood acted upon by the vitiating air. Every particle has become less vital, less capable of repairing strictures, or of carrying on functions; and the longer such air is respired, the more impure does it become, and the blood necessarily becomes more corrupt.

THE DO-AS-YOU-LIKE PRINCIPLE.

The Independent, in an article on the physical degeneracy of the American people, has the following true and important remark:

"The childs *will* governs too much. If they do not choose to go to bed, they sit up; if they *choose* certain articles of food they must have them—parents forgetting that instinct is no safe guide in a child, whatever it may be in an animal. So we see them with their delicate organization, keeping late hours, when they should go to bed with the birds; sleeping often in warm and lighted rooms, when the sleeping room should be cool and dark; and eating hot bread and cakes, sweetmeats cake meat and vegetables, pastry and puddings; drinking tea and coffee, to the infinite detriment of stomach and nerves. The injury thus early done can never be repaired; as a machine imperfectly constructed in the beginning can never be made to run faultlessly."

This is *the* secret. Parents should know that "*instinct is no safe guide to a child,*" particularly when a child is surrounded on all sides with poisonous delicacies. To ask a child, seated at a modern table, what it will have, and to give it what it asks for merely because it asks for it, is a very common practice. But it is as cruel as it is common. Have mercy upon the children!

KEEP TO THE RIGHT!

"Served him right," said the Jury—in other words, verdict for the Defendant—and so it did. The Law of the Road says, "Keep to the Right!" He did not do it.—So his near fore wheel ran crash! into the massive tire of a heavy freight wagon, and flew into splinters. The fiery horses sprang as if a demon lashed them; his best strength his best skill, could neither turn nor guide the mad creatures; and the trim slender carriage, shattered and sideling, slinging for

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a moment hither and yon across the street beyond the flying beasts; then, as they swerved from a tree, whirled, as one kicks over a basket, upside down, a splintery tangle of sticks and springs into the ditch.—Away went the fleet beasts; plunged headlong over the wharf at the far end of the street; one was drowned, and one hauled out, strangled and almost dead, scared, wounded, lamed and worthless. The foolish owner was pitched into an area, and picked out over the iron railing with a great cut over his ear, his nose broken, his shoulder dislocated, and a tremenduous contusion on his side.

PROFIT AND LOSS, THEREFORE.	Dr.
To One carriage	$200 00
" Two horses	300 00
" Time spent in bed, six weeks (say for a junior partner)	300 00
" Beauty lost (1 cut, 1 smash, 1 dislocation, 1 bruise) estimate	100 00
" Doctor's bill	100 00
" Wrath; disgust; loss of self respect; other mental suffering	100 00
" Same items consequent on losing lawsuit	100 00
" Lawyer's fees in same (two years in court)	300 00
Total	$1,500 00

Fifteen Hundred Dollars, dead loss; just because he didn't Keep to the Right!—And per contra whatever, unless for money caused to be spent by the triumphant, whose very triumph would almost remunerate him.

Yes; and if that impudent looking, tight pantaloon wearing, invisible legged, little dandy had kept to the Right, the burly athlete of a fellow who just passed would not have twirled him round so provokingly with one hasty knock of his huge shoulder as he strode down the street on his own side the way. Don't swear young man! It won't hurt you, nor hurt him; and if you undertake to punish him he will swallow you alive—if he wants to—without salt or gravy. Run along; and next time, Keep to the Right!

And there's a Right in the Path of Life too. In business and in pleasure, Keep to the Right! Green set up in the dry-goods line, in the same town with Brown, and undertook to run Brown off. He took pains to advertise him; fought against him with advertising light artillery, and the sapping and mining process of spreading reports and stories. Before he knew it *he* was upset in a ditch. He overtraded, in his furious zeal, couldn't meet his notes, "burst up," and is now a salesman in the very store he once owned, and labors in the shadow of a judgment obtained against him for slander, and kept hanging over him by the vindictive Brown, who wickedly swears that poor Green hasn't seen the last of it yet. Green had better have Kept to the Right!

So had young Wirgle. He had an overweening idea of his personal attractions and conversational and intellectual powers.—And like most conceited men—and monkeys—and Oliver Goldsmith—he could not bear to see any body do anything without trying to do it himself. Therefore, when he found that Thomas Strong was engaged to that pretty little Flora Henning, he forthwith undertook to "cut out" the said Strong; who, being well named, and finding what the little man meant, actually pulled his nose before Flora's face when he found him in her parlor one evening, and hustled him in a very indecorous manner forth from the dwelling.

People who *will* run on the wrong side of the road catch abundance of thumps and little pity. You will be sure not to be in the wrong if you Keep in the Right.

U. S. AGRICULTURAL SOCIETY.

The Fourth Annual Meeting or the United States Agricultural Society will be held at Washington, D. C., on Wednesday, January 9, 1854.

Business of importance will come before the meeting. Reports from its officers will be submitted, and a new election be made, in which it is desirable that every State and Territory should be represented.

Lectures and interesting discussions are expected on subjects pertaining to the objects of the association, by distinguished scientific and practical agriculturists. The transactions of 1853, containing a full account of the late exhibition at Boston, will be distributed to such members as are present.

The various Agricultural Societies of the country are respectfully requested to send delegates to this meeting; and all gentlemen who are interested in the welfare of American Agriculture, who would promote a more cordial spirit of intercourse between the different sections of our land, and who would elevate this most important pursuit to a position of greater usefulness and honor, are also invited to be present on this occasion.

MARSHALL P. WILDER, *President.*
W. S. KING, *Secretary.*

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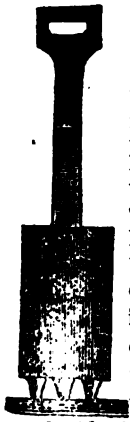
MECHANICAL.

STODDARD'S CORN PLANTER.



The annexed cut, gives an external view of Stoddard's Patent Hand Corn Planter, which received the first premium at the New York State Fair, last fall. Its superiority over Randall and Jones', and all other hand corn planters, arises from its distributing the kernels perfectly in each hill, instead of rattling them in, all in a pile. There is, undoubtedly, great advantages in this distribution, as the kernel will germinate quicker, and better, besides being much less likely to be found by worms, or other destroyers, when scattered in the ground. The final growth is also more natural, and vigorous, when each seed has a separate bed of its own. It even excels hand planting, in equality of distribution, as well as uniformity of depth.

One of these implements with six tubes, by a simple mechanical operation, places six kernels in each hill, and these at equal distances apart, and at an equal depth throughout the field.

It is used by a person planting, the same as if he were walking through the field, with a walking cane; it making the holes, when set down, and covering the seed when raised. An active man is said to easily plant from six to ten acres per day. Thus the price of the machine is saved in a single day, over hand planting; and if properly taken care of, it will last a life time. All such machines cheapen the expense of farming, thereby enriching the farmer.

JAPAN COTTON.

Samples of Japan cotton recently received in New York, have a fine color, and the fibre has a greater number of barbs, so that it will draw with proper handling into a very fine thread. It has apparently a great many natural crooks in each fibre, (this appearance may be given to it in dressing,) which renders it easier to spin, and makes a bat of it very elastic. From this cause, and a natural harshness, owing to the number of barbs in the fibre, it feels to the touch very much like wool.

A MACHINE FOR CUTTING WOOD.

Frederick Field, of Michigan, has obtained a patent for a wood-cutting machine which promises to be very profitable, especially where the wood is required to be very short, as for railroads, grates, and stoves. The cutting apparatus is a double circular saw, balanced on a central pivot, so that one person, with one hand, can cause it to cut a log which has been rolled on to a slide, into wood of any desired length, with remarkable rapidity. Its immense labor saving capacity over the axe may be inferred from the fact that it has cut a cord of wood from the log in *ten minutes*, and with help sufficient to keep it in constant operation, with an engine of ten or twelve horse power, will cut fifty or more cords of wood per day.

A machine, and the only one yet built, is now in operation near Three Oaks, Michigan, in cutting wood for the Central Railroad. The parties interested are desirous of disposing of an interest in the entire patent, or of selling the right for one or two of the States, on such terms as will insure the purchaser a good operation. They are willing to guarantee to any capitalist or company engaged in the wood business all the success they claim for the invention. Further information may be obtained of Fowler & Wells, New York.

IMPROVED WASHING MACHINE.

D. J. Bailey, Elk Grove, Wis., has invented an *improved washing machine* and taken measures to secure a patent for it.—It is seemingly well adapted to the purpose. The clothes are laid upon a fluted platform, which is placed horizontally in a tight box or vat, and a large roller, also having a fluted surface similar to the wash boards in common use, is hung in a sort of light frame. Of this frame the operator lays hold, pushing it back and forth, turning the clothes at intervals as the roller passes over them till they are completely purified. The power required to operate it is not great, and a large house dog, or perhaps better, a small windmill, would work one of them very well. We welcome all efforts in this line as tending to relieve the large amount of household drudgery; this branch in particular being rendered all the more unwelcome by its periodic occurrence, monotony, and fatigue.

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WHAT PEOPLE DRINK.

A very large portion of liquid is needed to supply the demands of the human frame, so that, besides the liquid contained in or mingled with our articles of diet, we find drinks prepared from vegetable substances in use in all quarters of the world. These drinks, though not devoid of usefulness, belong rather to the luxuries than to the necessities of life; they consist of infused beverages, which are drunk hot, and fermented liquors, which are usually taken cold. The love of such warm drink prevails almost universally, in tropical equally as in arctic regions; so that the practice evidently meets some universal want of our poor human nature. In Central America the Indian of native blood, and the Creole of mixed European race, indulge in their ancient chocolate. In Southern America the tea of Paraguay is an almost universal beverage. The native North American tribes have their Appalachian tea, their Oswego tea, their Labrador tea, and many others. From Florida to Georgia in the United States, and over all the West India Islands, the naturalized European races sip their favorite coffee; while over the Northern States of the Union, and the British provinces, the tea of China is in constant and daily use.—All Europe, too, has chosen its prevailing beverage. Spain and Italy delight in chocolate; France and Germany, Sweden and Turkey, in coffee; Russia, Holland and England in tea; while poor Ireland makes a warm drink from the husks of the cocoa, the refuse of the chocolate mills of Italy and Spain. All Asia feels the same want, and in different ways has long gratified it. Coffee, indigenous in Arabia or the adjoining countries, has followed the banner of the Prophet wherever his false faith has triumphed. Tea, a natlve of China, has spread spontaneously over the hill-country of the Himalayas, the table-lands of Tartary and Thibet, and the plains of Siberia—has climbed the Altais, overspread all Russia, and is equally despotic in Moscow as in St. Petersburg. In Sumatra the coffee-leaf yields the favorite tea of the dark skinned population, while central Africa boasts of the Abyssinian *chaat* as the indigenous warm drink of its Ethiopian peoples. Every where, un-intoxicating and non-narcotic beverages are in general use—among tribes of every color, beneath every sun, and in every condition of life. The tea of China forms the daily drink of a larger number of men than all the rest of these beverages put together. [Edinburgh Review.

Good Advice.—The learned and pious Bishop Horner says; "Only take a nespaper and consider it well, pay for it, and it will nstruct thee."

LIFE AT WEST POINT.

The cadets sleep in the barracks, in a room with one other; at half-past five in the winter the reveille awakens him; he immediately arises, doubles up his blanket and mattress. and places them on the head of his iron bedstead; he studies until seven o'clock; at that hour the drum beats for breakfast, and the cadets fall into rank and proceed to the mess hall. Twenty minutes is the usual time spent at breakfast. Guard-mounting takes place at half past seven, and twenty-four men are placed on guard every day. At eight o'clock the bugle again sounds, and recitations commence. At one o'clock the bugle again sounds, the professors dismiss their respective stations, the cadets form ranks opposite the barracks, and march to dinner. Between eleven and one a part of the cadets are occupied in riding, and others in fencing, daily. After dinner, they have until two o'clock for recreation, and from two to four they are occupied in recitations. At four o'clock the bugle sounds, and they go either to battallion or light artillery drill.

This exercise lasts an hour and a half.—After that, they devote the same time to recreation until parade, which takes place at sunset. After parade, they form into rank in front of the barracks, and the names of the delinquents are read by an officer of the cadets. Supper comes next; and, after supper, recreation till eight o'clock, when the bugle sounds to call to quarters, and every cadet must be found in his room, within a few minutes, at study, and must remain there thus employed until half-past nine. At half-past nine the bugle sounds—this is called tattoo; and at ten the drum taps, and at ten every cadet must be in bed, having his light extinguished, and must remain there till morning. If, during the night, the cadet is found to be absent from his room more than thirty minutes, and does not give a satisfactory account of himself, charges are preferred against him, and he is courtmartialed.

The use of intoxicating drinks and tobacco is strongly repudiated; so are playing at chess, wearing whiskers, and a great many other things. The punishments to which the cadets are liable, are privation of recreation, &c., extra hours of duty, reprimands, arrests, confinement to his room or tent; confinement in prison, confinement in dark prison, dismission with the privilege of resigning, and public dismission.

The Erie Canal Enlargement when completed, will be of capacity sufficient to admit the use of steam propellers of limited size, and we shall then be permitted to test the comparative economy of horse and steam power in propelling canal boats.

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DOMESTIC ECONOMY

OUR RECEIPE FOR CURING MEAT.

Those who will adopt our method of curing pork and beef, will be enabled to enjoy as fine hams, tongues, dried beef and rounds, as the Emperor of all the Russians can command, always providing that the meat cured is of the best quality. It is this:

To one gallon of water,
Take one and a half pounds of salt,
Half lb. of sugar,
Half oz. of saltpeter,
Half oz. of potash.

In this ratio the pickle to be increased to any quantity desired. Let these be boiled together, until all the dirt from the sugar, (which will not be a little,) rises to the top and is skimmed off. Then throw it into a tub to cool, and when cool, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpeter.

Several of our friends have omitted the boiling of the pickle, and found it to answer equally well. It will not, however, answer quite so well. By boiling the pickle, it is purified—for the amount of dirt which is thrown off by the operation, from the salt and sugar, would surprise one not acquainted with the fact.

To Keep Apples.—The most effectual method of preserving both apples and pears with which, of course, I recommended in preference to all others, is the following:

Having selected the best fruit, wipe it perfectly clean and dry with a fine cloth; then take a jar of suitable size, the inside of which is thoroughly coated with cement, and having placed a layer of fine sand, perfectly dry, at the bottom, place thereon a layer of fruit, apples or pears, as the case may be, and then a layer of sand; and in this way proceed till the vessel is full.—Over the upper layer of fruit a thick stratum of sand may be spread and lightly pressed down with the hands. In this manner choice fruit, perfectly ripe, may be kept for almost any length of time, if the jar be placed in a situation free from moisture.

[Journal of Health.

A Good Rat Trap may be made by filling a smooth kettle to within six inches of the top with water, and covering the surface with chaff. The first chap who gets in makes an outcry because he cannot get out, and the rest coming to see what the matter is, share his fate.

How to Starch Shirts.—Those ladies who wish to see their "lords" wearing nice glossy shirt bosoms, will do well to observe the following recipe: "Take two ounces white gum arabic, powder it in a pitcher and pour on a pint or more water, according to the degree of strength you desire, and then having covered it, let sit all night. In the morning filter it carefully from its dregs into a clean bottle, cork it and keep it for use. A table-spoonful of gum water stirred into a pint of starch made the usual way will give to either white or printed shirts a look of newness that nothing else can restore to them after washing."

Ink Spots may be removed from linen by dropping melted tallow on them, and then washing.

Oiling Latches and Hinges.—Every person who lives in a house, should spend fifteen minutes once every month in going over every part with a teaspoonful of oil and a feather, and give all the hinges, locks and latches a touch. It will save an incredible amount of scraping, banging, jarring, squeaking, harsh grating, dismal creaking, and other divers and several noises, which result from the want of a little oil.

Preserving Cabbages.—There are several good ways of keeping cabbages during winter by burying them out of doors. The difficulty is, it is hard to get at them during winter, without damage to those left. The following plan appears to avoid this difficulty:—Cut the head from the stump and pack closely in a cask, taking care to fill up all the vacancies with chaff or bran and keep in a dry cellar.

Wheel Grease.—Two parts hog's lard by bulk, and one each of black lead and wheat flour. We have heard wagons a mile on a still morning, uttering the most dismal sounds, from the want of a little of this material, and which a very litt[illegible] imagination translated into words—"meez-e-ry, meeze-e-ry, meeze-e-ry?"

To Wash Silk with great Success, spread it on a table, and then rub it w[illegible] a sponge dipped in a mixture of equal [illegible] of soft soap, brandy, and cane molas[illegible] Rinse it thoroughly in three suc[illegible] portions of water, and iron it befo[illegible] dry.

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BRILLIANT WHITEWASH.

Many have heard of the brilliant stucco whitewash on the east end of the President's house at Washington. The following is a recipe for it as gleaned from the National Intelligencer, with some additional improvements learned by experiments. Take half a bushel of nice unslacked lime, slack it with boiling water, cover it during the process to keep in the steam. Strain the liquid through a fine sieve or strainer and add to it a peck of salt, previously well dissolved in warm water; three pounds of ground rice, boiled to a thin paste, and stirred in boiling hot; half a pound of powdered Spanish whiting, and a pound of clean glue, which has been previously dissolved by soaking it well, and then hanging it over a slow fire, in a small kettle within a large one filled with water. Add five gallons of hot water to the mixture, stir it well, and let it stand a few days covered from the dirt.

It should be put on right hot; for this purpose it can be kept in a kettle on a portable furnace. It is said that about a pint of this mixture will cover a square yard upon the outside of a house if properly applied. Brushes more or less small may be used according to the neatness of the job required. It answers as well as oil paint for wood, brick or stone, and is cheaper. It retains its brilliancy for many years. There is nothing of the kind that will compare with it, either for inside or outside walls.

Coloring matter may be put in and made of any shade you like. Spanish brown stirred in will make red pink, more or less deep according to the quantity. A delicate tinge of this is very pretty for inside walls. Finely pulverized common clay, well mixed with Spanish brown makes a reddish stone color. Yellow-ochre stirred in makes yellow wash, but chrome goes further, and makes a color generally esteemed prettier. In all these cases the darkness of the shades of course is determined by the quantity of coloring used. It is difficult to make a rule because tastes are different; it would be best to try experiments on a shingle and let it dry. We have been told that green must not be mixed with lime. The lime destroys the color, and the color has an effect on the white wash, which makes it crack and peel. When walls have been [illegible] and you wish to [illegible] them [illegible] [illegible] [illegible]

LOUGHRIDGE'S PATENT CAR BRAKE.

An interesting trial of this highly important invention took place Dec. 11th, on the Hudson River Railroad, between New York and Sing Sing. The apparatus was attached to a special train of five passenger cars; the ordinary brakes were also in place but independent. The invention consists in having a chain running beneath the cars the entire length of the train. Attached to the engine is a reel, on which the chain winds. The reel is put in motion by the engineer, who presses against it by means of a convenient lever, a clutch friction pulley, and rotated by the engine. The chain as it winds up, operates all the brakes simultaneously. The engineer has the most perfect control of the brakes, being able to increase or diminish their pressure by the simple movement of the lever.

Running at 35 miles an hour the train was brought to a stop within 500 feet. At this stage of the experiment, some portion of the apparatus gave way and the train returned to the city without further exercise save the following:

The same speed was put upon the train, and the brakemen placed on the *qui vive*, in order to compete with Loughridge.—The signal to brake was given, and they instantly did so. The result was, that the cars stopped in as short a distance as when Loughridge's apparatus operated. This proves, we think, that with the common brakes, if properly manned, and the brakemen at their posts, a large proportion of all accidents might be avoided. It also proves the existence of a shocking degree of carelessness on the part of brakemen and other officials in this respect. It likewise proves the great necessity for some invention which shall place the brakes under the instant control of the engineer.

Mr. Loughridge's invention has been before noticed in our columns. It was patented in the United States and Europe through the Scientific American Patent Agency. [Scientific American.

Books.—A learned writer says of book: —"They are [illegible] in [illegible] without [illegible] or [illegible] with [illegible] without [illegible]. If you [illegible] them, they are not asleep; if you seek them, they do not hide; if you blunder, they do not scold; if you are ignorant, they do not laugh at you.

NOVEL METHOD OF PROPELLING STEAMBOATS.

Mr. C. McCord, of Sing Sing, N. Y., has invented the following method of propelling boats, which entirely dispenses with paddle-wheels or shafts of any kind. Instead of paddle-wheels or propellers, atmospheric air performs the business of propelling. This is effected in the following manner: Eight large bellows or air-pumps, making four sets, with two in each set, are placed within the boat and worked by the engine, each one of the two alternately with the other one.—Pipes or trunks leading from each bellows or pump, unite each set, and are carried to the bottom of the boat for a discharge of the air from the bellows. The operation is as follows: Air is drawn into the bellows from above the boat through pipes by the action of the engine, and forced out through the bottom of the boat, backward, against the water—an open channel or curb being provided beneath the boat to guide the passage of the air upon each side, along the keels, to the stern of the boat. It can not be doubted that a large amount of water may be displaced in this way, and the boat consequently be propelled ahead at a rapid rate. A great saving of power may, doubtless, be effected in this manner, as the disadvantages of paddle-wheels, the friction and immense weight of the shaft, are all dispensed with. Reaction water-wheels are moved by the pressure of water upon air. Why not propel boats by the pressure of air upon water? Action and reaction of water and air are equal: and the power exerted upon the air to force it against the water must drive the boat ahead with a velocity equal to the amount of that power. One great advantage here is, that while the pressure of the air upon the water propels the boat ahead, the current of air beneath the boat tends at the same time to buoy it up from the water. Mr. McC. has taken measures to secure a patent for his invention. An experiment is about to be tried for the purpose of testing the practicability of the new propeller.—Should it prove successful it must soon effect a great revolution in steamboat building.

[Life Illustrated.

NEW AIR SPRING FOR RAILROAD CARS.

A trial of a new air spring was lately made [illegible] to the [illegible] [illegible] the inventor [illegible] of [illegible], [illegible] 1848. The [illegible] in [illegible] the cup, over the [illegible] which a [illegible] is stretched—like the skin of a drum-head.—The car bottom is furnished with rounded projections, which rest on these diaphrams.

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A CURIOSITY.

We saw on Wednesday with a great deal of wonder, at the store of Mr. W. T. Cannon a couple of bottles, each of which would hold over a quart, and in one was a saw mill in operation and in the other a flour mill, also in operation. Both mills were moved by a crank in the neck of each bottle. The bottles and machinery are in the possession of Mr. A. H. Packington, who is in the employ of Mr. Cannon. Mr. P. says the machinery was built within their covering 35 years ago, by a person then a resident of New York but now deceased. He did it on a wager of $5,000, which he won in less than three years, which was the time allowed for the work. It has been suggested that the glass must have been blown over the machinery; but it is also said that such a thing would be impossible, with such kind of bottles. They are filled full with the machinery which is braced and pinned, and otherwise made strong. The neck of each bottle is filled with a plug, which is keyed close up to the neck. The mystery of getting in the key when there is hardly room between the plug and the neck of the bottle to get in a tool as big as shingle nail, is as great as any other mystery about the ingenious affair. These curiosities may be seen by anybody for a few days, without any charge.

[New Haven Palladium.

THE MEADOWS OF AMERICA.

Gov. Wright of Indiana, says that our grass crop is not properly appreciated. No crop, he says, approaches so near a spontaneous yield, and none yields so large a profit. The hay crop of the United States, in 1850, he estimates at 13,000,000 tons; that for 1855 he estimates at 15,000,000 tons, which is worth $15,000,000; while the whole cotton crop is valued at only $128,000,000. Of this crop more than half is produced by the four States—New York (which yields one fourth of the whole) Ohio, Indiana, and Illinois.—The grass crop which is used for pasturage is at least as valuable; so that this single herb is worth annually over $300,000,000.—Few people will believe that the grass crop of the State of New York is worth more than its wheat yet statistics show that such is the fact.

When will our western Farmers become sufficiently aroused to the cultivation of tame grasses? How many of you are going to sow next spring, and have got your seed already?

Eds. of the Farmer.

A WRITER has compared frendship to our shadow—while we walk in sunshine it sticks to us; but the moment we enter the shade it deserts us.

MRS. PARTINGTON AT THE CATTLE SHOW.

"This is a very beautiful sight for a person with a refined beastly taste," said Mrs. Partington at the agricultural show, looking at the big sheep, and addressing a tall young man by her side. He responded "yes'm."

"Is that a hydraulic ram?" she asked with great simplicity, provoking a smile on the young man's face, and a loud laugh from outsiders, who were attracted by the black bonnet. The young man informed her that this was a long wooled sheep, from which very long yarn was spun. "Ah!" said she "you are very kind; but can you tell me if the Pope has sent any of his bulls over here to this show?" "No," said he, smiling tremendously, "but among the swine is a descendant of the great Boanerges." Neither Mrs. Partington nor any one near knew what he meant, but he laughed loudly, and those out side laughed louder than he, much to his satisfaction. They laughed even louder when he found swinging from his button behind, a tag bearing the inscription "Vermont Boy" with age and weight given, but he didn't.—And Ike was looking so innocently all the while, trying to make the ram sneeze by tickling his nose with a straw. [Boston Post.

LET HER BE.—A Detroit mercantile gentleman who was traveling eastward a short time since went to the clerk of one of the Ontario boats to be shown to his room.—The clerk handed the applicant a key at the same time pointing to a door at some little distance, marked B.

Our friend went in the direction indicated but opened the door next to his own, marked A, where he discoved a lady passenger making her toilet, who upon the stranger's appearance uttered a low scream.

"Go away! "go away!" screamed the lady.

"Letter B," yelled the clerk.

"I am not touching her at all!" shouted the indignant merchant.

CAUSE AND EFFECT.—The Empress Eugenie expects to present the French nation with an heir to the throne; so the ladies of the French Court wear hoops; *so* the French *hout ton* wear hoops; *so* the American ladies wear hoops. It is hoped they will enjoy this *convenient* and grand contour until *the* event takes place, when the ladies of the French Court will *subside*, the ladies of the French *hout ton* will *subside*, and the American ladies will *subside*. [Evening Post.

THE STATEMENT that the ladies of the first families employ a cooper to hoop them, on great occasions, proves unfounded.

[N. Y: Times.

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PICKLES.

In the process of pickling, brass vessels, properly cleansed, are preferable to iron.—No vinegar should be allowed to cool in them as this would tend to the formation of virdigris, which is an active poison. Vessels that have any grease or fatty substance about them, should also be rejected as unsuitable, and in fact none should be used that are not perfectly sweet and clean. Having prepared your receptacle, make a liquor by boiling alum and salt in vinegar, in the proportion of two-thirds of a teacupful of pure salt, to a table-spoonful of alum in three gallons of vinegar. If any scum rises, boiling should be resorted to, and all the extraneous matter taken off till the liquor is reduced to a state of perfect purity. Moderately strong vinegar is the best for pickles. If it should lose its strength, it may be drawn off, and fresh vinegar substituted. The best cucumbers for pickles are those that are small and green, and of tolorably rapid growth.

When you have done pickling for the season decant the liquor, and scald and skim it as above directed, until it is freed from all extraneous matter, and rendered perfectly pure and clear; then put in the cucumbers and scald without boiling for five minutes, return them to the jars while hot. Cucumbers preserved in saturated brine may be prepared for pickling, simply by soaking and scalding. When this process is adopted, no salt need be added to the vinegar. If peppers or spice are deemed advisable they should be added to the liquor while hot, and before it is introduced to the pickles. A few bell peppers added to the mass will tend to impart a good flavor, and give a pungent taste to the vinegar. The long prickly cucumber is perhaps the most elegant for pickling, although the green cluster is a variety for this purpose. [N. Y. Northern Farmer.

EATING AND DRINKING.

"If you wish," said Sydney Smith, "for anything like happiness in the fifth act of life, eat and drink about one-half what you could eat and drink. Did I tell you my calculation about eating and drinking? Having ascertained the weight of what I could live upon, so as to preserve health and strength, and what I did live upon, I found that, between ten and seventy years of age, I had eaten and drunk forty-four horse wagon loads of meat and drink more than would have preserved me in life and health! The value of this mass of nourishment I considered to be worth £7,000. It occurred to me that I must, by my voracity, have starved to death fully a hundred persons.

WHY FARM LABORERS ARE SCARCE.

A correspondent in reply to a communication from Mr. Buckley, published in this paper some time since, contends that the difficulty in procuring intelligent, honest and industrious native-born men to labor on the farm, arises from the fact "that men who labor for wages upon the farm, are used with very little respect by their employers, who, instead of treating them like men who are deserving respect, treat them more like slaves who are devoid of all those noble feelings that prompt men to be honest and faithful, and by this means excite in them feelings and sentiments in opposition to the interest of their employers, and cause them to seek employment in the cities and villages, or in some less arduous labor.

"The fact is, that most farmers, when they have once hired a man, think that henceforth he is their slave to work from sunrise till dark, and that no matter how faithful he may be, or how much he may do, he is nothing but a hired man, and is therefore not entitled to one smile of approval or one word of commendation, because he is receiving *wages*.

"This is a great mistake. Let farmers show their hired men that they respect them as men—treat them as such, and manifest an interest in them, and they will very soon find that they can easily obtain men to work—men too who are intelligent, honest, industrious and faithful, and who will manifest an interest in advancing the work of their employers, who are well qualified to carry on the work of the farm in the absence of their employers, and who will in the end prove themeelves worthy of the respect and confidence bestowed on them."

[Country Gentleman.

A Brave Old Lady.—A Mr. Loyd, living at the San Jose Mission, recently sent a sum of money to his mother, in the Eastern States, an old lady eighty years of age, with the remark that she might use it for her own private purse or for her passage to California. Nothing daunted by the formidable journey, the brave old heart took passage for California, on the steamer, entirely unattended, and arrived safely at her des ination.

Spurious Indigo is said to be very common in the commercial markets. The test of genuineness is to rub its surface with the finger nail or any hard substance, when a genuine article will show a coppery or bronze color, varying in brightness according to the quality of the article—the spurious article is devoid of this.

Flowering Plants, especially in the winter, should have but little water, and the ground should not be very rich—otherwise, they will run to stalks instead of flowers.

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EDITOR'S TABLE.

How Fruit and Fruit Trees Grow in the West.—No small amount of surprise and admiration has been expressed by eastern horticulturists, who have attended the western exhibitions of fruit during the past season. The size and beauty of our apples, pears and peaches seem to take them all aback; and to impress them, perhaps, for the first time, with a consciousness of the superiority of the western soil and climate, for the growth of fruit: especially all those kinds that require a rich soil.

The same superiority also exists in the growth of western nursery trees, as compared with eastern. With equal cultivation, our new and vigorous soil will grow them as large in three years, as in four at the east. This is a circumstance that ought to be considered by those who are buying trees from the east for orchards; stunted trees come slow to bearing. We copy the remarks of P. Barry, late editor of the Horticulturist in a communication to that paper, headed "A Short Gossip about the West, and the Fruit Grower's Meeting at Burlington."

"I have been much away from home of late, and now that I am at home I find myself too busy to indulge in writing, yet I must give you a few notes concerning the West and Western fruits and fruit growers. First allow me to congratulate you that you have traveled the country between the Lakes and the Mississippi. I am sure that you have enjoyed your journey to Chicago, and return home, as I have done, thankful that you had lived to see the Garden of America, those vast prairies, the valley of the Mississippi—where nature has prepared a soil of the most wonderful fertility—the deepest and richest that the plow or the spade ever entered. All this you will readily assent to now that you have visited this wonderful country, and seen for yourself the growth of the trees and the size of the fruits.

"From Chicago to Burlington on the Mississippi is a delightful day's ride. You leave Chicago at 9 o'clock in the morning and reach Burlington in the evening about 8, having had ample time to discuss a good dinner at Mendota. The road is in excellent order, fine coaches, polite conductors and everything in excellent trim. The country is prairie nearly all the way; but do not suppose it is monotonous, for on either side, villages, bran new and prosperous looking, enclosed farms with immense corn fields like forests of poplars, great herds of cattle on the open prairies, luxuriating among the richest pasture, bits of woodland looming up here and there like islands in the ocean—these all invest the landscape with sufficient variety. It was all new to me and I enjoyed it right well, as I also did the prodigious stories which were related by every new passenger we picked up, concerning the growth of towns, prices of land, &c., &c. Sometimes I lay up a stock of reading material when starting on a journey, but here I had no desire to read except in the book of nature. A new field of study was spread before me.

"Burlington, Iowa, is pleasantly situated on the west bank of the Mississippi, and contains at this time some 9 or 1[illegible] inhabitants. Part of the city is in a sort of basin, some 50 or 100 feet above the level of the river, with a bluff in their rear over 1[illegible] feet high. In other places the ground rises gradually from the river to the top of the bluff. As we crossed the river in the evening we were reminded of Newburgh on the Hudson. The broken character of the ground renders the grading of streets a work of considerable labor but it is going on vigorously. Stores and comfortable dwellings are in process of erection on all sides, and there is every indication of substantial prosperity. Railroads have given this city a new birth, and her progress hereafter must be rapid. The population is of a superior character, the situation healthy, and there is every inducement for business men who are looking to the West to settle there. What interested me most was the orchards and gardens; you will say, "Of course." I have never been taken so much by surprise as I was in visiting some of the gardens around Burlington. My curiosity was awakened by some specimens sent into the exhibition rooms of the Fruit Grower's Society. *Beurre Diels* weighing a pound and a half; *Swan's Orange* about as large; *Louise Bonne de Jersey*, and *Vicar of Winkfield*, enormous. Some monster *Bartletts* had been preserved in ice. Such a sight in the way of pears I have never seen, and I at once resolved to visit the trees and know all about them. Dr. Tallant, to whom I feel greatly indebted for many kind attentions, immediately conducted me to the garden of W. F. Coolbaugh, Esq., the well known Banker of Burlington.

"His residence is on the top of the bluff and his garden contains scarcely an acre—there I found the pear trees—beautiful pyramids, all on quince plants about seven or eight years, now 8 to 10 feet, or 12 feet high. The early varieties were of course gone, but I found on the trees *Beurre Diel*, *Beurre d' Anjou*, *Vicar of Winkfield*, *Glout Morceau*, *Beurre d' Aremberg*, and others, all nearly twice as large as good specimens grown in New York.

"The trees were remarkably vigorous, and hung full of fruits—what a sight! And all this without any special manures or culture of any kind—the ground was merely kept clean. One tree of *Glout Morceau* was blighted.

"Dr. Tallant took us next to his own garden, which is situated in that part of the city which I have described as being in a basin. The garden is small, but filled to overflowing with the choicest fruits and flowers, and all in the finest possible condition.

"His pear trees are still finer than at Mr. Coolbaugh's, and the specimens still larger. *Brandywine* I observed a noble tree, and the Doctor told me that it bore specimens that weighed a pound! The trees were the same age and the varieties much the same as at Mr. Coolbaugh's. Quite near to Dr. Tallant's we were shown a garden which was formerly owned and planted by his Excellency Gov. Grimes; planted at the same time as the others. The trees looked well, but had not received proper care latterly.

"The Governor has a new residence on one of the highest points of ground, commanding an extensive and beautiful view of the river and surrounding country. His garden contains a large and fine collection of fruits, but the trees are young and not yet in full bearing.—These which I have mentioned are all town gardens, and I assure you I do not know anything here in our famous valley that can equal them. What do you think of this?

"The nurseries are no less wonderful. I observed apple trees one season's growth from the root graft, nearly 6 feet high and stout in proportion.

"Messrs. Comstock & Avery have, in various stages of growth, some six hundred thousand apple trees. Messrs. Neely and Brother have also a fine nursery of some 30 acres, with a fair proportion of the various fruits and ornamental articles. In [illegible] series I [illegible] that the Pears, Quince and Plum do not flourish in the deep prairie loam as they do on the bluffs, where the rock lies not one foot nearer the surface. I was much pleased to see the Quince do so poorly; the shoots were slender as new growth had no leaves on. The Pears had been leafless nearly a couple of months. There is something to study here, and I wished for a month of time to look into the matter thoroughly.

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"You will see this matter touched upon in the proceedings of the Fruit Growers. The exhibition of fruits made by the society was a splendid one. I really mean *splendid*, especially in apples. About 300 feet of tables were loaded with heaped-up dishes of monstrous fruit. You must pardon a free use of adjectives.

"In one collection, that of Mr. A. Hillery, I should think that the specimens ranged between 18 and 25 ounces, and fair as wax work.

"Yellow Belle-flowers, Ortleys, Maiden's Blush, Rambo, Fall Pippin, Vanderveer, &c., so large that I barely recognized them.

"The large hall was most tastefully and conveniently arranged. There were between 40 and 50 contributors from Iowa, Illinois, Wisconsin, and New York. I have never before seen so large a collection of fruits gathered together from so wide an area; from this you may judge how novel and instructive it was."

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PRODUCTIONS OF WISCONSIN.—In an estimate of the probable amount of wheat grown in the United States, during the past year, the New York Semi-Weekly Tribune of the 30th of October, estimates Wisconsin at 7,000,000 bushels. If the balance of their estimates are as wide of the mark as this, their conclusions cannot be very reliable data, on which to base transactions in produce. It is the opinion of those who profess to be judges, that we have raised about 12,000,000 bushels—and shall sell more than eight millions of bushels to eastern buyers, for a sum not less than $10,000,000. This is certainly pretty well for so new a state, and a single article of production. When we add the additional products of the soil—the vast products of our extensive pineries and lead mines—it will make up a total that has never before been equalled in so new a state. It will not soon be beat, except by Wisconsin herself.

Much of our progress, and large production, is owing to the introduction of agricultural machinery, into almost every process of farming. But for the timely, and extensive introduction of the reaper, how could our vast wheat fields have been harvested? The cradle, with the scantiness of men is that know how to use it, would have been almost as insufficient as the sickle of our fathers. So, everything seems to come in good time; the sickle answered for the acre fields of narrow limits and fathers. The cradle followed in the train of progress, onward, and answered all purposes, until the vast Prairie fields were brought to bear upon production; these called for something new, and brought forth the Reaper—a triumph in labor saving, equal to the Cotton Gin. An establishment like Manny & Co., at Rockford, Ill., which makes and sells its 3,000 reapers per annum, adds a working force to our harvest fields, equal to about 30,000 men; or 50,000, even, of such as they work at the South. This shows the triumph of Northern ingenuity over Southern brutality; and tells why, and how the working Yankee beats the Chevalier of chivalry, in production and progress. Whilst the reaper is doing so much, it is not alone; multitudes of other labor-saving machines are doing their work in every department. And multitudes of ingenious men are constantly inventing, improving, and multiplying the facilities to labor. To recount them, even for a time, and exhibit the effect of them [illegible] as our farmers and business men [illegible], will be a constant and pleasant [illegible].

—

A NEW STATE.—"A new state is likely soon to be admitted to the American confederation. The Legislature of Michigan has passed an act for the formation of the new State or Territory of Superior. Michigan gives part and Wisconsin another part to form the new Commonwealth, which is the seat of the great mineral wealth of the nation. Its mines of copper and iron are unsurpassed by any in the world, and it is destined to be one of the most interesting, wealthy and important portions of the Union.—*Ex. Paper.*

Let us hope our own legislature will second this movement as the making a new State of the most unnatural portion of Michigan, and a portion of our Northern Territory, will be a benefit to all parties, as it will bring contiguous Territory together, and for the material for an additional and first class State, without any damage whatever, either to Wisconsin or Michigan.

—

THE ANTIQUITIES OF WISCONSIN.—Surveyed and described by I. A. LAPHAM, Esq., and recently published by the Smithsonian Institute, is one of the new and notable books of the season. We were among the few who were fortunate enough to get a copy and have been highly interested in examining its contents. It evinces a world of patient labor as well as high artistic skill, in surveying and preparing its numerous plans and illustrations. It accurately illustrates all the prominent earth works extant of the aboriginal tribes in the various portions of our State, quaint, curious and numerous as they are. Here, collected within the lids of a book, the antiquarian or the curious, may contemplate all that remains of the bygone races who have inhabited this beautiful prairie land, during the long lapse of ages. Multitudes have come and gone in successive generations, each fulfilling their mission in their accustomed and chosen way and these earth marks and symbols, made from their dust, are the only written books or language that they have left us from which to decipher their history and character: and how soon this earthly written record will be out of print. The plow-share of the white man is traversing its pages on all hands and but for this copying of it by our industrious artistic and philosophic LAPHAM, how soon it would have been among the things that were "both substance and shadow," and as oblivious to the future as are the hands that made it. This book is a valuable addition to history, and its authorship a credit to Wisconsin.

—

BAKER'S SELF-ACTING PUMP.—There is no doubt, but [illegible] Forcing and Lifting Pump, is the best thing yet in its line.

It seems to combine all the requisite advantages, and is subject to the fewest possible objections. Being a Double Acting, Forcing and Lifting Pump, with no more liability to get out of order, than the old fashioned lifting pump; and it may be as easily taken apart for repairs.

By its reciprocating action, of forcing and lifting, it maintains a continued and powerful current, by the application of the least possible force—throwing about twice as much water in a given time as the best lifting pump. Again, it is just the thing for wells that are too deep for a lifting pump, (30 feet,) as it will work just as well in 100 as in half a dozen, [illegible] the additional power, for the additional depth. This is a great [illegible] to [illegible] deep wells, from which they wish to raise water, by wind, horse, or hand [illegible] an improvement [illegible] and [illegible] Agents [illegible] are [illegible] agents to sell the right to manufacture and the same, in the different Counties in the State. Those who wish to engage in their manufacture, or sale will be furnished by them with circulars illustrating all their advantages. See their advertisement.

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FINAL AWARD OF THE JURY FOR THE BEST REAPER AND MOWER!—It is with pride as an American and as a citizen of the city of Rockford, that we learn by yesterday's mail that JOHN H. MANNY, of this city, has received the above Grand First Prize for his celebrated Reaping and Mowing Machine at the Paris World's Fair Exhibition.

The machine was manufactured by Manny & Co., of this city, and sent to Paris last spring. Upon the close of the Exhibition it was purchased by Prince Napoleon in *preference to all other* Reapers and Mowers. His own language, as follows, in reference to the machine is of itself a prize, coming as it does from a man of considerable agricultural experience, and after witnessing and carefully observing the workings of the many machines on exhibition. This we say is a prize of itself to Mr. Manny greater than the greatest.

We cannot but congratulate Mr. M. upon this grand achievement, and are proud of the honor he has conferred upon our city and country.

The following is translated from a Paris paper:

"The Prince Napoleon wishes to sanction by his august patronage the general employment of this machine by the French people, and in two successful trials made at Trappes he has inaugurated the introduction of *this Machine* into French husbandry. Subsequently, in giving a candid account of the trial made under his supervision, he declares the Manny machine *the best*. Prince Napoleon has purchased the machine placed on exhibition to represent its practical workings on his estate at Villeroy. He says in the most explicit manner that Manny's Reaper and Mower is the *most perfect in mechanism and of the greatest simplicity*. He adds: It is *easily worked*, and is changed from a Reaper to a Mower in less than a minute." [Rockford Dem.

—

WE TAKE pleasure in referring to the Daguerrean Gallery of Messrs. JOHNSON & FULLER, whose card may be found in our advertising columns. They are artists of the first order of ability and do everything in their line as well, or better, than any other establishment west of New York. Their instruments and apparatus are of the most improved and perfect stamp, and everything about their establishment bespeaks a superior artistic skill not often found. Those wishing pictures just right should give them an early call.

Our beautiful title page which was designed by Mr. Johnson is a *chief de œuvre*, in its way, and bespeaks an artistic skill of the highest order.

—

SWEET POTATOES, &c.—We take pleasure in referring to the advertisement of B. C. CHURCH, of Wyoming, Iowa Co., Wis., offering sweet potatoes and melon seeds for planting for sale, and also instructions in regard to the manner of cultivating the sweet potato and of keeping them through the winter. This vegetable, we think, might with profit be more extensively cultivated in this state and Iowa, and we are glad to see Mr. CHURCH, who has met with so good success in raising them, offer to assist others in doing the same. Mr. C. received the first premium at the State Fair last fall for the best lot of sweet potatoes on exhibition; and his "better half," as will be seen by reference to the November number of the Farmer, furnished the editors with a lot of the first quality, raised from seed which she preserved in this state through the winter.

—

THE FAMILY MESSENGER—Is the name of a new paper recently started at Janesville, Wis., by Messrs. DOTY, BUSHNELL & Co. It is edited by WM. M. DOTY, and its few first numbers indicate that it will always be a profitable and welcome visitor to the family fireside.

WISCONSIN STATE JOURNAL.—Daily, Tri-Weekly, and Weekly.—By RUBLEE & GARY.—"The Weekly State Journal is of the largest size published in the State; is devoted to political and general intelligence; is the only republican paper published at the Capital; and is an excellent advertising medium. The State Jonrnal, during the session of Legislature, will contain in addition to the general news of the day, full and reliable reports of the proceedings of the Legislature, with all debates of general interest, Supreme Court decisions, synopsis of the reports of the general State Departments, and in general all the various matters of interest transpiring at the Capital." See Prospectus in our advertising department, for terms, &c.

—

MILWAUKEE SENTINEL.—The prospectus of this paper is to be found in our advertising department. It is the oldest and most reliable commercial and newspaper in the State, and all business men who desire to keep "posted," cannot fail to find it greatly to their advantage to take the daily—and the weekly particularly recommends itself to the patronage of those who desire a cheap newspaper, giving as it does, from three to four day's later news than eastern papers, reaching us at the same time.

—

"HOW TO RAISE MELONS."—We again insert the advertisement of C. S. ARBEL, of Janesville, in regard to his discovery of an improved mode of raising melons, with an addition thereto, reserving the right to return the dollar to each person who may send him the same, provided he does not procure enough applicants to well repay him for communicating his new process.

—

RURAL PUBLICATIONS. — The Country Gentleman, weekly; The Cultivator, monthly; and the Illustrated Annual Register, are publications of rare merit, issued by LUTHER TUCKER & SON, Albany, N. Y., prospectuses for which may be found in the appropriate place in the Farmer. To those who wish eastern rural publications we can recommend these works as among the best.

—

ARGUS AND DEMOCRAT—By PROUDFIT & CALKINS, Madison, Wis.—is published Weekly, Tri-Weekly and Daily—is the official paper of the state, and publishes all official documents, reports, laws, &c. For terms, &c., see prospectus in our advertising columns,

—

JANESVILLE FREE PRESS.—Jos. BAKER has disposed of his pecuniary interest in this paper to Messrs. BURNETT & HALL, by whom its publication will be continued and the size of the paper increased. Mr. BAKER in company with J. F. WITHROW, continues in charge of the editorial department of the Press.

—

JEFFERSON COUNTY REPUBLICAN.—We have received an addition to our exchange list of a neat spicy paper of the above name, published by C. E. HOYT and A. SANBORN, at Jefferson, Wis. A long and useful life to it and its publishers is our earnest wish.

—

OSHKOSH DEMOCRAT.—JONATHAN DOUGHERTY, late editor and proprietor of this paper has disposed of his interest in the same to MARTIN MITCHELL, who continues its publication.

—

GENEVA EXPRESS.—The citizens of the beautiful village of Geneva and of the rich and fertile portion of Walworth County adjoining, have long desired a paper in their midst to assist in developing their natural resources, and invigorate and publish their local affairs; and now that they are supplied with an independent, enterprising sheet we hope they will see that it is well supported.

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1856. PROSPECTUS 1856.

OF THE

ARGUS & DEMOCRAT,

MADISON, WISCONSIN.

The *Argus & Democrat* is published Weekly, Tri-Weekly and Daily.

TERMS AS FOLLOWS:

Weekly, in advance, per year,	$1,50
" Clubs of ten or more, each,	1,00
" for Session of Legislature,	,50
Tri-Weekly, in advance,	3,00
" for the Session,	,75
Daily, in advance,	6,00
" for the Session,	1,00

This is the

OFFICIAL PAPER OF THE STATE,

And publishes all official documents, reports, laws, &c.

A FULL and COMPLETE REPORT of the LEGISLATIVE PROCEEDINGS will be published daily, and the whole will appear in both our other editions.

This is the only paper in the State which publishes THE LAWS *BY AUTHORITY*, and is useful, on this account, to all who wish to know what Laws are enacted.

OUR NEWS DEPARTMENT,

Is now in condition to vie with any paper in the State. We have made arrangements in connection with the EASTERN ASSOCIATED PRESS and the WISCONSIN TELEGRAPH COMPANY, for daily dispatches, exclusively for this paper. By this arrangement we publish the news up to 3 o'clock, P. M., in our evening paper, of all quarters from

Halifax to New Orleans!!

We thus lay the news before our readers one day earlier than any other Madison paper, and at the same time with the Milwaukee papers, thus giving to all readers West or North, later news by twenty-four hours, than any other paper in the State.

Advertising & Job Work,

Done in the best of style, at the lowest rates. Our Job Department is not excelled by any estaalishment in the State. Colored or other fancy jobs done promptly.

Address, CALKINS & PROUDFIT,
Proprietors,
[jan.2m] MADISON, Wisconsin.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous acessions to it, we possess superior facilities for doing work promply and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,
L. A. WINCHESTER, WM. DeWOLF.

Merino Sheep.

THE subscriber has a splendid flock of 1000 MERINO SHEEP, ranging from one-half to full bloods; including about 30 fine MERINO BUCKS. Parcels of which he will sell to those who wish to start good flocks, on favorable terms as to price and payment; or he will sell or let a few of the Bucks, if applied to soon.

D. J. POWERS.

Madison, Wis., Nov. 1855-tf.

J. A. SOMERBY.

BOOK & JOB PRINTER.

Basement of Bruen's Block, Washington Avenue.

MADISON, - - - WISCONSIN.

WISCONSIN STATE JOURNAL,

DAILY, TRI-WEEKLY AND WEEKLY,

BY RUBLEE & GARY.

THE WEEKLY STATE JOURNAL is of the largest size published in the State, is devoted to political and general intelligence, is the only Republican Paper published at the Capital, and is an excellent *Advertising Medium.*

THE DAILY STATE JOURNAL,

a six column paper, will be furnished at $5 per annum, in advance.

THE TRI-WEEKLY STATE JOURNAL,

Each number containing the entire number of two dailies, will be furnished:

Single copy, per annum, in advance,	$3,00
To clubs of four and under ten, per copy,	2,50
To clubs of ten or more, per copy,	2,00

THE WEEKLY STATE JOURNAL, will be furnished:

Single copy, per annum, in advance,	$1,50
To clubs of four, or under ten, per copy	1,25
To clubs of ten or more, per copy;	1,00

State Journal for the Session.

The *State Journal*, during the Session of the Legislature, will contain in addition to the general news of the day, *full and reliable reports of the proceedings of the Legislature*, with all debates of general interest, Supreme Court decisions, synopsis of the reports of the several State Departments, and in general all the various matters of interest transpiring at the Capital. Session subscribers will be supplied at the following rates:

WEEKLY STATE JOURNAL for the Session, cents per single copy; to clubs of eight or more at the rate of 37½ cents per copy.

TRI-WEEKLY STATE JOURNAL for the Session, 75 cents per single copy; to clubs of six or more, 50 cents per copy.

DAILY STATE JOURNAL, for the session $1 per copy.

☞ Terms, invariably in advance, money may be sent at our risk by mail; and fractions of a dollar remitted in postage stamps. Address

RUBLEE & GARY,
Dec. 2m. Madison, Wis.

ROCK COUNTY NURSERY.

Situated in the Southern Limits of the City of Janesville, (East side of the River) on the Telegraph Road to Beloit.

THE proprietors have now for sale a large stok of trees, at prices which cannot fail to suit purchasers, and having devoted their entire attention to their propagation and growth, having been to much expense in obtaining scions from bearing trees they feel warranted in recommending them to the public.

APPLE TREES 5 to 8 feet high 16 cts each or $140 per thousand.

PEAR, PLUM, and CHERRY, all of which are furnished Dwarf or Standard from 30 to 50 cts. each.

Those of extra size with fruit buds additonal prices.

We would call particular attention to our stock of Evergreens, Ornamental Shrubbery, Bulbs, Roses, Plants &c., which we think is not excelled at the west. Nursery stocks, and scions furnished on liberal terms. Trees carefully packed for any part of the United States.

Catalogues sent gratis on application.

Jan. tf. COLBY & WILLEY.

D. S. DURRIE,

Wholesale and Retail Dealer in

BOOKS & STATIONERY,

BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.

January, tf.

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UNIVERSITY OF WISCONSIN.

BOARD OF REGENTS.

J. H. LATHROP, President.....MADISON.
A. HYATT SMITH,.....JANESVILLE.
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FACULTY OF SCIENCE, LITERATURE & ARTS.

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DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
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AUGUSTUS L. SMITH, A. B., Tutor.

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D. C. AYERS, M. D., Professor of Obstetrics and Diseases of Women and Children.
GEO. D. WILBUR, M. D., Professor of Materia Medica.
——— ———, Professor of Surgery.
——— ———, Professor of Anatomy.
——— ———, Professor of Jurisprudence.

The vacant chairs of Medicine will, probably, be filled at the annual meeting of the Board of Regents, in January, and the Department will be opened as soon thereafter as shall be deemed advisable.

The First Department of the University, namely, that of "SCIENCE, LITERATURE AND ARTS," may now be regarded as completely organized; though the Professors, elect, of Mental Philosophy and of Chemistry, will not enter upon the duties of their Chairs, till the first of January, 1856—the beginning of the second term of the College year.

The number of students attending the instructions of the year just closed (early in 1855), has been ninety-two; and a large increase is looked for under the new and full organization of the College Faculty.

INSTRUCTION.

The College Faculty will hold three regular terms of instruction annually, of thirteen weeks each, beginning:—

1. On the third Wednesday of September;
2. On the first Wednesday of January;
3. On the fourth Wednesday of April.

Commencements, on the fourth Wednesday of July.

Teachers' Classes will annually receive professional instructions in Didactics, or the Art of Teaching, from Professor Read, of the Chair of English Literature.

Classes in Agricultural Chemistry will be formed each year, and receive instructions from Professor Carr, during our second term, and simultaneously with the session of the Legislature.

ACCOMMODATIONS.

The second College edifice has just been completed, and will be open for the accommodation of students in September. In the two buildings there are forty private studies, and about double that number of lodging rooms; besides ample public rooms for recitation and lecture. In the south wing of the new building are apartments for the residence of some of the families of the Faculty.

BOARD.

The large dining hall in the new building will be open for the accommodation of students, in connection with the families of the resident Faculty. Board of good quality will be furnished in the hall, at the family tables of the Professors, at or under two dollars per week. In order to carry out this plan with economy and safety, it has been ordered by the Executive Committee, that the student, on entering the hall, shall deposit with the Treasurer $25 for the term of thirteen weeks, or *pro rata* for any less time; the proper drawback to be paid over at the close of the term.

Board in private families in town ranges from $2 to $3,50 per week. Some of the students board themselves at their lodgings in College, at rates varying from $0,75 to $1,25 per week.

EXPENSES.

TUITION FEE, per term of thirteen weeks,...	$4,00
ROOM RENT, INCLUDING HEAT, do. ...	3,00
Contingencies,.....	0,00
Total for the year, (three terms),.....	$21,00

It is believed that the policy of the Board of Regents, in thus completing the appointments of the University, and adding greatly to its educational capabilities, as well as their further endeavors to render membership both economical and safe, will be met by a just public confidence, and a correspondent enlargement of patronage.

Additional information, relative to the University, may be obtained by addressing any member of the Board of Regents, or of the Faculty.

JOHN H. LATHROP.

Madison, Jan. tf.

Fairbank's Patent Scales.

These Scales have been long known, and have stood the severest test, and are always right. Judicial decisions have been made in several of the States, within the last few years, where a discrepancy in weights was the matter in controversy, and in every case has been decided in favor of the party using Fairbank's Scales, and upon the grounds that they are the standard Scale.

The genuine Fairbank's Scales are manufactured by E. & T. FAIRBANK'S & Co., under the supervision of the original Patentee, at St. Johnsbury, Vermont, and at no other place. Rail Track—Railroad—Depot—Warehouse—Miller—Hay—Coal—Farmer's—Cattle—Platform and Counter Scales, of every size and modification, for sale at manufacturer's prices, and warranted, both for accuracy and durability, by C. L. HARMON & Co., 197, South Water St., Chicago; LANSING BONNELL, 89 & 91, East Water St., Milwaukee; and by B. H. CHADBOURN, General Agent, 197, South Water St., Chicago.

Jan'y. 1, 1856. t. f.

RURAL PUBLICATIONS.

THE COUNTRY GENTLEMAN.—A Quarto Weekly Journal of 16 pages, embracing every subject of practical interest to the Farmer and Country Resident, either in the Field or at the Fireside. New volumes commence 1st of January and July in each year. Price $2 a year.—Send for a Specimen copy.

THE CULTIVATOR.—A Large Monthly Journal of 32 pages, exclusively devoted to Practical Agriculture Horticulture, and now about to commence its Twenty third year. Price, Fifty cents.

THE ILLUSTRATED ANNUAL REGISTER of Rural Affairs—Being a concise Cyclopædia of Rural Matters, issued yearly in a cheap, popularly illustrated, and got up in the best style. Price 25 cents.—Bound, fifty cents—*Sent free of postage paid.*

The attention of all persons interested in Rural Pursuits is invited to the above works. All communications subscriptions and orders, should be addressed to

LUTHER TUCKER & SON,
Jan. Albany, N. Y.

H. FRIEND & BROTHERS,

MERCHANT TAILORS,

DEALERS IN

READY-MADE CLOTHING, CLOTHS, CASSIMERS, VESTINGS, TRIMMINGS, &c., &c.

MILL'S NEW BLOCK, KING STREETS,

MADISON, WISCONSIN.

☞ All orders will meet with prompt attention.
June, 1853-1y.

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CHERRY PECTORAL

AND

CATHARTIC PILLS

Are Curing the Sick to an extent never before known of any Medicines.

Invalids, Read and judge for Yourselves!

JULES HAUL, Esq., the well known perfumer of Chestnut street, Philadelphia, whose choice products are found at almost every toilet, says:

"I am happy to say of your CATHARTIC PILLS, that I have found them a better family medicine for common use, than any other within my knowledge. Many of my friends have realized marked benefits from them and coincide with me in believing that they possess extraordinary virtues for driving out diseases and curing the sick. They are not only effectual but safe and pleasant to be taken, qualities which must make them valued by the public, when they are known."

The venerable Chancellor Wardlaw, writes from Baltimore, 15th April, 1854:

"Dr. J. C. AYER—Sir: I have taken your Pills with great benefit, for the listlessness, languor, loss of appetite, and Bilious headache, which has of late years overtaken me in the spring. A few doses of your Pills cured me. I have used your Cherry Pectoral many years in my family for coughs and colds, with unfailing success. You make medicines which *cure*, and I feel it a pleasure to recommend you for the good you have done and are doing."

The widely renowned S. S. STEVENS, M. D., of Wentworth, N. H., writes:

"Having used your CATHARTIC PILLS in my practice, I certify from experience, that they are an invaluable purgative. In cases of disordered functions of the liver, causing headache, indigestion, costiveness, and the great variety of diseases that follow, they are a surer remedy than any other. In all cases where a purgative remedy is required, I confidently recommend these Pills to the public, as superior to any other I have ever found. They are sure in their operation, and perfectly safe, qualities which make them an invaluable article for public use. I have for many years known your *Cherry Pectoral* as the best Cough medicine in the world, and these Pills are in no wise inferior to that admirable preparation for the treatment of diseases."

Capt. JOHN PRATT, of the ship Marion, writes from Boston, 24th April, 1854:

"Your Pills have cured me from a Bilious attack, which arose from a derangement of the Liver, which had become very serious. I had failed of any relief by my Physician, and from everything I could try, but a few doses of your Pills have completely restored me to health. I have given them to my children for worms, with the best effects. They were promptly cured. I recommended them to a friend for costiveness, which had troubled him for months; he told me in a few days they had cured him. You make the best medicine in the world, and I am free to say so."

Read this from the distinguished Solicitor of the Supreme Court, whose brilliant abilities have made him well known, not only in this but the neighboring States.

NEW ORLEANS, 5th April, 1854.

Sir: I have great satisfaction in assuring you that myself and family have been very much benefitted by your medicines. My wife was cured, two years since, of a severe and dangerous cough, by your CHERRY PECTORAL, and since then has enjoyed perfect health. My children have several times been cured from attacks of the Influenza and Croup by it. It is an invaluable remedy for these complaints. Your CATHARTIC PILLS have entirely cured me from a dyspepsia and costiveness which has grown upon me for some years—indeed, this cure is much more important, from the fact that I had failed to get relief from the best Physicians this country affords, and from any of the numerous remedies I had taken.

"You seem to us, Doctor, like a providential blessing to our family, and you may well suppose we are not unmindful of it. Yours respectfully,

LEAVITT THAXTER."

"SENATE CHAMBER, April 5th, 1854.

Dr. J. C. AYER—Honored Sir: I have made a thorough trial of the Cathartic Pills, left me by your agent, and have been cured by them of the dreadful Rheumatism under which he found me suffering. The first dose relieved me, and a few subsequent doses have entirely removed the disease. I feel in better health now than for some years before, which I attribute entirely to the effects of your Cathartic Pills. Yours with great respect,

LUCIUS B. METCALF.

The above are all from persons who are publicly known where they reside, and who would not make these statements without a thorough conviction that they were true.

PREPARED BY

Dr. JAMES C. AYER,

PRACTICAL AND ANALYTICAL CHEMIST,

LOWELL, MASS.

Sold by Carey & Gordon, Beloit; Holden, Kemp & Co., Janesville; J. K. Ellert, Monroe; John Wright, Madison; E. R. & F. A. Utter, Elkhorn; T. Mason, Dubuque, Iowa; E. E. Gay, Burlington, Iowa; and by all Druggists everywhere. v7n9: 6m.

LAKE MILL'S NURSERY.

THE undersigned are prepared to furnish, at reasonable prices, STANDARD TREES of the leading varieties of

APPLE, PEAR, CHERRY, PLUM, APRICOT, CURRANT, GOOSEBERRY.

Also a fine stock of Evergreens and Ornamental Shrubbery, Flowering Bulbs; three of the best varieties of Pie Plant and Asparagus Plants; Acacia and Osage Orange Trees.

We would call special attention to our fine lot of DWARF PEAR TREES, bearing size; also, twenty best varieties choice PLUM trees, large size, propagated on English stocks. We think we have the best the State affords.

Please call and examine, at PLUMB & Co.'s Nursery, Lake Mills, Jefferson County, Wis.

J. C. PLUMB,
K. ATWOOD.

Oct., 1855-6m.

REAPERS AND MOWERS,

WITH ADDITIONAL

IMPROVEMENTS FOR THE HARVEST OF 1856.

First Grand Silver Medal

FOR the best Reaper & Mower at the Paris World's Fair Exhibition, 1855. Awarded to John H. Manny, and the machine purchased by Prince Napoleon for his estate in preference to all others. Several thousand of these machines are being manufactured with all their improvements for the next harvest, and warranted superior to any other harvesting implement, all orders promptly attended to. Address

MANNY & CO.,
Rockford, Illinois.

Jan. tf.

FARMERS OF DANE COUNTY,

And Counties Adjoining.

JOHNSON & FULLER,

Take this method of informing you *all*, that you are abundantly able to come up to the *Excelsior Picture Gallery* with your families, young and old, and be either *Daguerreotyped*, *Photographed*, or *Ambrotyped*, which ever suits you best, either of which will be done in the highest style of art, and warranted to give satisfaction or no sale.

Those who desire Photographic views of their farm-houses, and yards, be they log cabins, or gilded palaces, can have them done on short notice, either plain or beautifully colored in oil colors, at a trifling expense.

Fine gold lockets, pins and rings for sale.

Don't miss the place.

Enquire for the *Excelsior Gallery* and for your humble servants, JOHNSON & FULLER.

Madison, Jan. 1st, 1856.

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STEAM PRINTING FOR THE MILLION.

MILWAUKEE

Daily, Tri-Weekly & Weekly

SENTINEL,

Nos. 205 & 207 East Water St.

THE OLDEST AND MOST RELIABLE

Commercial and Newspaper

IN THE NORTHWEST.

CIRCULATION - - - - 20,000 PER WEEK.

THE PROPRIETORS would tender to the public their grateful acknowledgments for the liberal and unwavering support extended to them in the past, which has enabled them to increase their establishment to its present *mammoth proportions*. And would add, that no efforts will be spared in the future, as none have been in the past, to make it worthy of the confidence of the business community. One of the firm has just returned from the East, where he has purchased an entire

NEW JOB OEFICE,

Selected under his personal supervision, and with especial reference to the wants of the business of the West;

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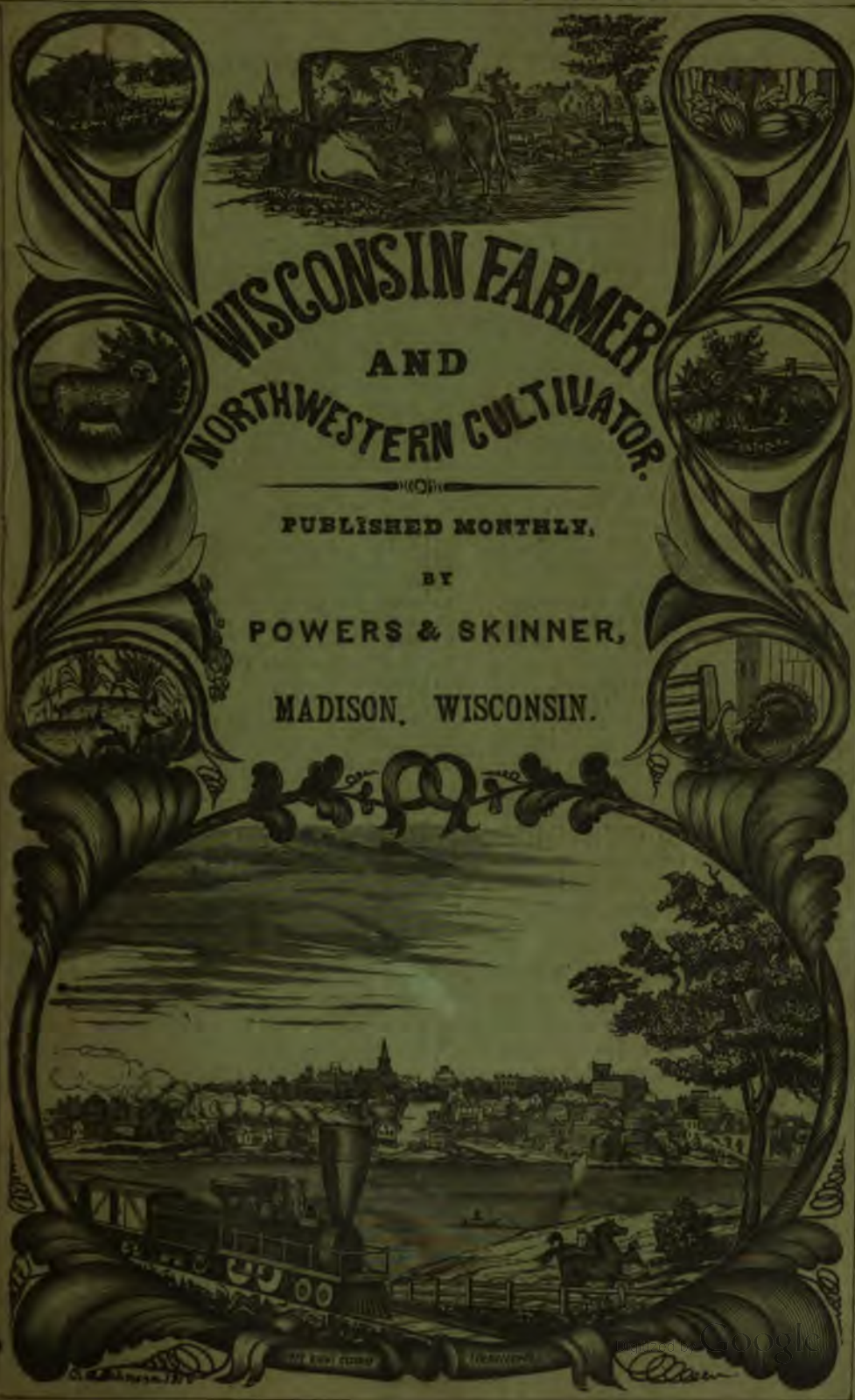

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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WISCONSIN FARMER,

AND

NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., FEBRUARY, 1856. NO. 2.

SUGGESTIONS FOR FEBRUARY.

"Now Zembla's rocks, (the beauteous work of frost,)
Rise white in air, and glitter o'er the coast;
Pale suns, unfelt, at distance roll away,
And o th' impassive ice the lightnings play."

Reder, are you a parent? and have you children attending the district school? If so, we would ask if you have visited that institution during the winter which is now more than half gone? Yes, the district school, of which we all talk so much and so patriotically, and upon which we usually bestow so little real attention and thought! What proportion of the thousands of school-houses of the west, or east even, are what they ought to be? How many of them are insignificant and shabby in their appearance, even when new—standing at some dirty four-corners of the public highway, solitary and alone, without enclosure, out-buildings, shade tree, or shelter—with the green wood pile in the snow, and often scanty at that; with a poor slippery door-step, and the house unbanked—perhaps not under-pinned. Let us look inside, and see if that is any improvement upon its external appearance. Crowded, dim and smoky; close, unventilated and sickening in its atmosphere; with the smaller scholars huddled together on the low, hard seats, so near the hot stove as to muddle and stupefy their intellects—not to speak of headaches, sweats and consequent colds—while the larger scholars, on the back seats, keep up a continual clatter of boots and shoes, to avoid freezing their feet. In the midst of the scene, moves the "School Master," (that once great man in every little town, but like Presidents and Governors, now, wonderfully dwindled in stature.) Is he what he ought to be? has he been selected with discrimination and care, for his high-toned sentiments, learning, and zeal in the cause of popular education?—or has the low standard of dollars and cents determined the district committee in their choice? But, supposing the teacher all right, which is to be hoped, we will next inquire into the condition of the books, blackboards, and apparatus for instruction; are they well chosen, ample, and in good condition? in a word, dear friend, as before asked, have you visited the school at all during this winter, to learn the facts in the case, or to cheer the scholars and teacher with your presence and counsel? If you have not, is there not yet time? and ought, and will you not do it?

So much for the district school. Let each parent ask and answer to himself the foregoing questions; for if the school-house lies at the foundation of our intelligence, virtue, and liberty, it will not do to neglect it. But, on the other hand, let us pay our money cheerfully for its proper fitting-up, and look well to it that good teachers are employed, well paid and fully encouraged by the example and friendly countenance of parents.

Are all the readers of the FARMER insured against loss by fire? If not, why delay at this risky season of the year? A few dollars paid in to a good company, will shield you safely for years. Mind you, we say a *good* company; BEWARE of transient agents and companies of which you know nothing! The country is full of them, and they cannot usually be depended upon; but that is no objection to good companies, (all good things are counterfeited,) and we have such in our own state. Next in importance to insuring is to be careful, each for himself. A large share of our accidents arise from one of two causes: First, from carelessly arranged stoves and pipes; and secondly, from an improper handling of ashes. All who would not burn, should look well to these seemingly little things. You will not deem them small, when your house, or barn is enwrapt in flames; which may be the case at any time in a moment. We say then to all, insure, without delay, in some good responsible company. We regard mutual companies as preferable for farm and tolerably safe for village property.

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Those who are taking care of stock, as the winter wears on, should carefully watch each creature, and notice if any are falling away. Calves and underlings need extra care, or the crows will have them before grass grows. Too little pains is usually taken to salt creatures, in winter, and nothing is more common than allowing them to suffer for water; compelling them to eat snow, or go without, though eating nothing but dry hay or straw. It is like a person eating a dry crust of bread without drink. Now, any man who has any humanity about him, should look well to these things, and if he has no humanity, his interest ought to prompt him at least. Cows that are forward with calf, also, need special care and feed, as they have two lives instead of one to support.

Working oxen, also, that are depended upon for spring's work, should be kept in good condition, even if grain has to be bought to do it, as so much depends on their vigor in the plow field. The task of an ox is a slavish one at best, and if Old Broad is thin and poor, ten to one if he don't lie down in the furrow, during the first hot, faint days of spring. Keep your stock well, if possible. If you are short, be sure and feed the creatures well, and pinch yourself, whatever is necessary to make up the difference; this is the best way, as you will know how much you can stand, without winter-killing or getting the blackleg. To take good care of stock, requires a great deal of attention and labor; and the more care they get the better. It will more than pay to card all creatures daily.

The Norwegians are among the best common herdsmen of the west. They think a great deal of their cattle, and bestow that kind of care which makes them thrive and do well. We have no doubt that, a few years hence, some of them will rank among our best, and most extensive herdsmen. Stock raising is bound to be a paying business in this country for a long time to come—for oxen, the dairy, or the market. The vast, unlimited West, that lies beyond us, and is going to continually and rapidly settle, will constantly draw a heavy draft upon us, while the East, with its great and growing cities, consumes whole hecatombs of oxen at every meal. Thus all causes combine to maintain good prices and current sales

It is time your ice-house was filled, if you have one, and if you have not, it may pay to make one even yet, as they are very easily gotten up, sufficiently capacious for a common family, and contributing as much, perhaps, to the comfort and luxuries of a family, as anything else of the same expense. It is well, when convenient, to connect them handily with the cellar, as they in that case make an excellent depository for all articles that require to be kept cool. Great care should be taken in packing in the ice, to put in none that is partially thawed, nor to leave open spaces for the air. All such spaces as cannot be filled with ice, should be filled with saw-dust or chaff; and pains should also be taken to interpose saw-dust or straw in all places between the ice and the wall of the house.

Look over the farming tools and implements, and see what needs repairing for spring's use. Attend to them while there is leisure; it will save a deal of trouble and delay when busy times come. Five minutes' attention when you are going to the shop, will supply a bolt in the plow, and save perhaps a day's delay of men and teams in wheat sowing. Think of these things, ye who would be smart and prosperous farmers.

Are all your arrangements made for seed to sow, and plant, the coming spring? Are you going to sow any grass seed—Red Top, perchance, in your meadows and marshes? If so, you will need it early in March. Do it, if you possibly can, that you may improve the quality of your hay, and have better spring and fall feed for your creatures.

It is a well established fact, that Red Top and Timothy will catch well on the meadows and marshes, by being sown as early as the frost is coming out, and thoroughly scratched in with a sharp toothed drag. It is certainly a very cheap and simple method of getting in tame grass, and well worth trying by everybody who has such lands, and has not time to drain, plow, and lay them down in a more thorough manner. It is high time that our farmers adopt some course to make butter and cheese, as cheap on our cheap lands as in the city of New York.

Tame grass and good dairymen and maids, are what we want to do it. How long shall we have to wait for them?

One "funny man" will bother a whole neighborhood.

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For the Wisconsin Farmer.

TIMBER IN THE PRAIRIE REGIONS.

MESSRS. EDITORS—In Southern Wisconsin, Northern Illinois, and most of Iowa, there is a very notable scarceness of *Timber;* and under the present management of affairs in this region, the quantity is being still further reduced, while very little thought or effort is given to replace or supply this invaluable article; so that it has, or is becoming, a subject second to no other in importance and consideration to the welfare and prosperity of our otherwise so highly favored country; and yet with timely and appropriate exertions, the present occupants may prevent this matter from becoming any more alarming—may remove all serious apprehensions in regard to future supply; and to point out, in some degree, the mode while stimulating to its earnest adoption, is the design and wish of this article. Some may say—"We can do well enough at present for *our own* necessities, without concerning ourselves for those that come after us; our progeny may look out for themselves as we have done for ourselves"—and so on—but there is no more justice than paternal magnanimity in such sentiments, because, with our present system of operations, we are not only robbing mother Earth of the present supply of timber, but we are verily cutting away or eradicating the very germs and nucleus which naturally are designed to propagate and continue a reasonable supply to our successors—we ought at least to be just, if not magnanimous. That was a beautiful paternal regard manifested in the old Greek father, Laertes, when, in advanced age, he was planting hedges and making improvements in the country, as he answered the astonished querist, "why he was thus laboring in his old age?" that "he was building against his son returned from Troy?" This reply is worthy of consideration and emulation by us of the present time, in regard to the *growing of timber*; it is both our duty and interest to devise and put into lively operation some scheme of producing a necessary supply of wood for various purposes, "against the coming of our sons," while the additional pleasure may accrue to many of us, of sitting under our own shade, eating of our own vine, and bountifully enjoying the fruits of our *timely* labor in planting trees, and carefully tending them.

There was a lamentable neglect on the part of the earlier settlers of this region, in that they did not sooner and more generally plant orchards upon their new homes; and the evils of this palpable neglect are now the more plain and deeply regretted, in noticing the pleasant luxury of those *few* who gave *timely* care to this matter contrasted with the sorry destitution of those who, with equal opportunities, shiftlessly *neglected* the little *early* pains which would have likewise secured to them similar sumptuous enjoyment—yet neglected to their loss.

But, in the beautiful economy of the whole system of true nature and Providence, nothing is truer than that the thoughtful and honest may reap blessings and be benefitted by appropriately regarding the errors of himself and others. In this light, or view of principles, the new settler may derive wisdom and improvement from the error of his predecessors, by *not* doing likewise, but by early planting orchards; and both old and new emigrants may also read a wise, useful lesson, and greatly profit themselves by at once taking steps efficiently to grow, not only fruit orchards, but groves and forests for their wood and timber—the neglect to properly attend to the *latter*, will be as much more calamitous than neglecting the former, as the whole scope and necessity of *timber* is more vast and essential than that of the orchard; and, doubtless, it is safe to say, that none will dispute that the full importance of timber is paramount to that of orchards; and therefore, every one who is any way interested in the tillage of the land should at once as earnestly put forth the proper exertions for *Forest culture*, as for fruit—yea, more, as the body is before the meat.

There are two aspects in which the matter is to be viewed—namely, the present *scarcity* of timber; and the numerous, increasing, and devouring objects which are constantly *consuming* it. This view of the matter calls for an adequate two-fold provision or action to meet the contingency—namely, to devise some efficient means of supplying, as far as may be, the demand; and to discover and provide suitable substitutes, to every reasonable extent, so as to limit the consumption.

At the time—several years ago—of the earliest settlements in this section, this subject did not appear or present itself in that

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alarming aspect which it *now* bears, for two reasons: 1st. the ordinary demands of the occupants were not nearly as numerous or great in extent, which, of course, left in their minds no great fear of want; and, 2d, the monstrous cormorant devourer of forest and fountain—the Railroad Engine—had not commenced burning and smoking among them, nor set up his insatiable and continual demand for ties and timbers to lay his iron track upon; this circumstance was not even thought of by the generality of settlers, and not more than half dreamed of, even by the most imaginative speculator upon progressive splendor—nor did any anticipate to an adequate degree the magnificent extent to which towns and cities would be every where and continually built upon our rich and fertile soil—none seemed able to calculate the immence capacity of the *Prairie Lands* for sustaining population and improvements—and of course, could not be expected to estimate or properly appreciate the approaching demands for wood and timber.

But, to us—in whose sight the "Star of Empire already holds its Westward way"—the importance of this matter is more plain; we can see, if we will, in some measure, the magnitude of this demand—to us, very clearly, "coming events cast their *demands* before;" our privileges are rich, and our responsibilities are correspondingly great; the obligations upon farmers, and all lovers of our beautiful country, are sacred and pressing, to see to it that it be not *wasted* and *destitute* of wood and timber forever.

And I am glad that you, Mr. Senior Editor, are Lamp-Lighter to this Light-House of Science—the printed paper—this farmer's oracle—you are right from among the people—you have observed, experienced, and do know their wants—the sacred demands of our agricultural country—in this particular direction;—you are a farmer of practice and understanding, and of course know whereof we speak—therefore, I rejoice, that you are at the head, and have taken hold, in good earnest, of several vital and primary subjects, eminently interesting to the farmer especially, and to the country generally. Such men are needed at the Head of our Agricultural Journals—men of practice as well as reading.

But to the previous question—what we aim at—is to convince the farmer of the deep, *undeferrable* importance of taking sure steps for *growing trees;* to show him that it is both his *interest* and *duty* to do it; that he *can* do it; and to persuade him at once to take hold, with zeal and amition *to do* it—with as much hope, earnestnes, and pleasure as he now manifests in raising grain and fruit—and it can be—will be—shown, that the operation may be more profitble and less vexatious than those pursuits—and with much less risk, and with *enduring* remuneration.

This first article is designed paticularly to awaken those who should be interested in the matter, and to direct their thoughts and feelings actively to it;—for, when adequately realized, no branch of their operations is more surely important;—and then in a succeeding article, some suggestions will be made upon the best, most suitable varieties of trees and shrubs to be introduced and cultivated upon the Prairies, together with the manner of raising them. It is certain that several kinds of trees can be successfully grown here, and with a profit to the operator of from twenty-five to one hundred per cent. upon the whole cost or investment. The growing of trees on the prairies can be made to yield a greater profit than the growing of grain. A variety of facts and observations can be adduced to prove this—it can be made as clear as is the fact, that *something efficient must speedily be done* to increase the quantity and supply the continual and increasing demand for timber here.

Let Agricultural Societies think well on this subject.

This fact becomes the more grave and startling, as we contemplate the vastly increasing demand for Railroads in this country, and the certainty that they will be constructed; and added to this fact, in fact, growing out of it, principally, the equal certainty of an overwhelming increase to the population and building operations of our Prairie States, induced by the additional facilities for migration and market, so extensively afforded by these additional Railroads—which become incalculable blessings, or depressing evils—just in proportion to the manner in which we meet, improve, and use them—powerful for good or evil, as we shall ordain.

D. S. C.

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For the Farmer.

RURAL LIFE.

We talk of the pleasures of rural life and paint its charms in all the gorgeous hues of fancy, but after all the real merits and true advantages of living in the country, and away from the bustle of the town, are not fully estimated. They seem to be understood, but entirely overlooked. Still hundreds and thousands of men and women, young and old, cling to the dull haunts of city life, and never taste the sweets of a natural, unrestrained and vital existence. Even in the United States wherein there is boundless extent of territory, and such soil as gives the husbandman the richest remuneration for his toil, we see humanity the wretched minion of want and poverty, in crowded towns—whereas, it should be the lord of abundance in the Western vineyards of plenty. According to the census of 1850, one-eighth of this nation's entire population live in cities of upwards of ten thousand inhabitants; and, of towns and villages, in which life is moulded after the cramping and effeminating forms of the greater metropolis, there are still hundreds and thousands not noticed in this reckoning. Probably, more than one-sixth of all the people of the Union live in cities and villages, and know of real, untrammeled nature, only by repute. In many older countries the proportion of city denizens is still greater, and as a general rule, the more densely populated a country becomes, the more its ratio of city inhabitants is increased above that of its rural districts.

In the state of New York, centralization is rapidly increasing the population of its cities, at the expense of the rural portion of the country, and in some others of the more eastern states the same principle is at work, though not as visibly and powerfully.

The charms and virtues of rural life are *talked of*—applauded to conviction—but the country still does not draw the one who admires and praises it from the strong lure of the smoky town, to inhale its purer air, breathe in its congenial fragrance, quaff from its limpid and unadulterated fountains, taste its wholesome fruitage, fresh from the laden bough and clustered vine, or recreate among scenes where Nature is the implicitly-confided-in and only worshipped divinity. We love to talk about the country—to tell of woodlands, pastures, meadows, hills and dells, and brooks, and lakes, and caves, and all the enchanting scenery which the buoyant heart may find in rustic rambles;—we love to chat of Spring time, when sportive lambs, and joyful kine, and long-housed steeds are cropping the first shoots of the tender grass—when the wild birds are merry, and fresh buds and flowers are smiling in the morn of prophecy;—we love to dream of shady retreats, green hill-sides and groves, to hide us from the sultriness of Summer's noon-tide, and think how full of joy the task of watching the young fruit and grain develope in the rays of the life-giving sun;—we love to worship at the shrine of golden Autumn—to paint in imagination the ample returns of nature's general harvest—its multifarious and choice bounties;—we love to dwell upon the farmer's fireside when the unwritten prophecies of Spring have been fulfilled—when the torrid sun of Summer has wrought his blessed mission—when the bounty of Autumn is garnered up, and its many-hued leaves have been swept by wild frolicking winds, and dispersed among the avenues of decay—to think of enjoying with him his lucious feasting, and cozily imbibe the nectar of the grape and apple, while the storm is riotous without, and old Winter has usurped his icy throne above the repose of vegetation: but it is all a work of mere fancy, and despite our knowledge we still delve and scheme for the pleasures of true life in cramped and motley communities.

How many thousands there are now starving in eastern cities, who, were they once scattered, no matter how carelessly, over the uncultivated lands of the West, would be at once upon the high-road to plenty and prosperity! A simple exertion of philanthropy, to inform, encourage, and stimulate them to exertion, would seem to be all that is necessary to the improvement of their conditions. It has sometimes occurred to us that moral reformers could not better direct their efforts for the good of universal humanity, than by driving, with moral force, the useless poverty from our larger towns, and thus banishing it entirely. In rural pursuits the unhallowed influence of vice would melt away before the quiet and simple pleasures of useful life, and many fruitless persuasions and oaths of abstinence would be rendered useless, or pre-

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served inviolate. Many—thousands—are ignorant of the glowing inducements held out by the far West to those who can labor, and are without sufficient means to start them at the East, and what a world of good might be accomplished by giving them barely true information, and a few words of persuasion to quit their dens of misery, and flee to this "land of milk and honey." Persuasion would make many of them come, and greatly lessen the weight of human suffering; but many would be pleased with tales of rural life, and believe even the ideal portraiture which the warm philanthropist would give them, without putting forth one exertion to secure the blessings of independent life. There is no need of want or woe in this land of ours. There is room enough, and there are homes enough for all. If these facts could be but strongly enough impressed upon the cramped masses of humanity we have referred to, we should find many a new garden and plantation in the West, and many a woe-worn visage would be wreathed in sunny smiles. A. J. M.

For the Farmer.

WHAT AN ENTERPRISING MAN WITH SMALL CAPITAL CAN DO IN WISCONSIN.

MESSRS. EDITORS—We frequently read in some eastern book or paper about a Greeley or a Barnum practicing "high farming," that is, they expend thousands of dollars in building dams for irrigation, and in manuring, &c., &c. Now, this may all be very well for those who have the money to spare for that purpose. But the world wants to know what can be done in the west with a small capital, say from $500 to $1000. Such is the nature of the letter that every man receives from his eastern friends.

If some of our literary pioneers who are competent to the task would write a small work entitled, "What an Industrious Man can do with a Capital of $500 on a Western Prairie," I think it would meet with an ample sale, and be the means of converting many "fast young men" of Atlantic cities into useful and honest farmers—into men who would rather dance to the tune of a breaking plow than that of "Old Dan Tucker," and into men whose souls would go into ecstacies at the hum of a ten-horse threshing machine.

But suppose the book did not pay the publisher! There is a great work for some one to do, to elevate farming from the mud and mire of ignorance and superstition in which it has been STUCK for thousands of years. Agriculture will yet be reduced to a science, so that success or failure will not be laid to luck or to the Lord.

If any one will undertake the authorship of the book, a neighbor of mine can give him an item. This neighbor of mine entered forty acres of school land, two years ago last May, at $7,50 per acre—paid ten per cent. down. He had only $500. $200 went for household traps and furniture; the rest for improvements. He now has an orchard of 2,000 trees, (many of which have fruit buds on,) and a nursery of 10,000, and a house that has cost him $1,000—all debts paid but $271, due to the State in 1863.

He has been offered $3,000 for his farm and personal property, but would probably refuse $5,000. Of course he has not been idle for the last two and a half years.

CLINTON, WIS., Jan., 1856. J. T.

For the Farmer.

WATER FOR OUR PRAIRIE REGION.

MESSRS. EDITORS—It is well known that in some portions of our prairie country—where they are broad and high—much cost and suffering is caused by the scarcity of *water*, and the difficulty of procuring it; so much so, that it is the main reason why large tracts remain uninhabited. This fact, together with the *apparent* absence of *building and fencing materials*, constantly deters many people from settling upon and tilling those rich and productive fields—so extensive and in such perfect readiness for the plow, already clear of all stumps, roots, and stones, for the beautiful working of the best reaping and mowing machines.

Now those circumstances are entirely harmless, useless bug-bears—or rather disadvantages most easily obviated—and not worthy of a moment's consideration, compared with the task and vexation of clearing and working heavy timbered lands; and with a few paragraphs I propose to show the facts clearly. And first—for a supply of *water*.

Nature operates upon a system of equivalents; and is far more equal and bountiful in her distribution of blessings and facilities—the common wants of particular sections—than most of us are apt to think without

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some investigation. These reflections arise in viewing the vast prairies, with climate and soil of unsurpassed fertility and healthfulness, capable of feeding and clothing and sustaining an immense population—only for the common want of *water* and *timber*. This would *seem* to be an oversight in Providence, in having spread out to the admiration of man so inviting a fabric, yet leaving it unsuitable for appropriation. But the thoughtful and intelligent see farther—they have discovered and realize the equivalent or substitute—and see in them great gain.

On the score of *water* it is not generally known what a large quantity of the pure article falls annually upon the whole surface of our country; nor how easily and cheaply, in every place, an abundance of the very best water may be obtained, for *all purposes*, by a judicious system of *cisterns*. The amount of rain and snow water which annually falls in this latitude is very large, and did it not readily flow off to the great rivers and lakes, or arise by evaporation, much of the surface of our country would be flooded, very often. Therefore, this interesting fact should be taken into *active* consideration by the occupants, and others, of the splendid but almost brookless prairie-districts—as a matter of immanent importance to them—and which may be converted into one of their richest blessings.

And now for the figures: by various gauges and observations of the rain, in several locations, it is ascertained that from 22 to 28 inches depth of water falls annually on the whole surface of the earth in this latitude—an everage of *over two feet deep* on every farm in the whole prairie country—an amount of water which would be frightful, and would soon drown us all out, if it remained long *on* the farms

From these facts, it may be seen by a little calculation, that the annual amount of water which may be collected by the roof of a 30 by 40 foot barn will be about 800 barrels, or 400 hogsheads—enough to supply drink to a goodly lot of stock and horses most of the year—more, even, than is needed, when we remember that there are always many weeks—after showers, thaws, &c.—when there is plenty of drink for stock in the fields, even in the dryest locations, where there is no living or running water. And sufficient, substantial *cisterns* to preserve this large amount of water, while constantly used out, can be constructed at the barn, for the cost of digging and stoning a good well—and even for less than half the price of the deep ones on many of the high prairies, as "Rock," "Grand," and others—while the supply is also more sure.

Then, for the *house* and *culinary* purposes, rain water, for several reasons, is infinitely preferable to well or brook water. The roof of an ordinary farm dwelling-house, is sufficient to conduct from seven hundred to a thousand barrels of *soft water* into the cisterns annually; while the necessary cisterns to secure it, as it is daily used out, need not cost as much as the usual house wells now do.

Thus, with reasonable and timely care, families and farms, in all locations, may have ample and convenient supplies of *pure, soft water*, at the same, or less cost, as many now obtain water from wells and brooks. And what is of still more importance, in favor of using rain-water, is the *matter of health;* and herein lies the greatest argument, as I will show by the highest authority and facts—considerations which ought not to be unheeded, or lost sight of by enlightened or judicious householders. The fact is established by different proofs, that the stomach and bowels are greatly less liable to derangement, disease, or to be affected with miasmas, under the use of cistern water, than from that taken directly from the earth.

During one of the late cholera seasons, the writer had an opportunity of seeing this principle admirably demonstrated. He was spending the summer and fall in one of those cities near the Mississippi river, where one portion of the town lies on the flat along the river, and the other portion is built on an exceedingly high bluff, where it is very difficult to obtain any earth water; and little or none but cistern water is used; it was almost exclusively used in every department of household business—drinking, cooking, and bathing; the result was, that scarcely a case of cholera, or other sickness occurred on the bluff, while cholera, fevers, and diarrhœa, &c., were very frequent and fatal in the lower town, where well and river water was generally used.

And within a few years past, we have read several well accredited statements in connection with medical Cholera Reports, showing that in the most afflicted localities, in both Europe and America, with persons

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or families where only rain-water was used for drinking and culinary, and bathing purposes, scarcely a fatal case of cholera occurred; although that frightful disease prevailed malignantly in the vicinity among those who used the earth water generally.

Some months ago I prepared, by request, a short essay on this subject—of securing rain-water on the prairies—with a view of directing the attention and securing the action of the farmers, to this most judicious mode of obtaining water for all uses on their premises, equally healthy to man and beast. Since writing that article I have got hold of a small pamphlet on the subject, from which I here extract, briefly, a few authorities for the consideration of those interested. A French Commissioner, writing on the subject, says:

"It has been fully ascertained, both at Paris and elsewhere, that rain-water is a prophylactic (or preventive) of cholera, and that the disease has never proved an epidemic in any city where rain-water is exclusively used."

A physician writing in an English paper, says: "Hard water for cooking is objectionable; many vegetables are nearly spoiled in it; and it is difficult to get a good infusion of tea or coffee in it; the water of the city of London requires full one fifth more to obtain an infusion of equal strength, as that obtained by soft water."

And all apothecaries know that they cannot make as good decoctions, tinctures, or compounds of any kind with hard as with soft water; they always require rain, or distilled water, for their mixtures.

Dr. Hobbs, of Memphis, writes that "by the exclusive use of cistern water cholera will disappear and never return." This is known to him by analysis and an experience of twenty-four years. He says, "it should be used for all personal purposes."

Prof. Lea, of Cincinnati, says, "it is a verified fact, which will stand the test of the strictest investigation and obtain universal credence, that rain water used for drinking, instead of the hard water of wells, acts as a preventive of cases in cholera. No city exclusively supplied with rain or soft water ever suffers from epidemic cholera."

Dr. Biegler, of Rochester, N. Y., says: "I consider hard or impure water dangerous to health, and a pre-inducing cause of disease. The purest water is that which falls from the clouds—or is distilled, or filtered." And so says Prof. Dewey, and many others.

Facts and authorities, showing the healthfulness of rain-water, and rightly filtered water, over that which is taken directly from the earth, might be multiplied to many pages; but, undoubtedly, what is said above is enough to direct the farmers and others to their best interests; for it was my object in writing this article, to remind the occupants, especially of the *prairies*, that it is much easier and cheaper than many seem to know, to get a plenty of the best water on their premises, where they are now almost destitute, or at least much stinted.

And now that cisterns and filtering apparatus are brought to a goodly degree of perfection, any one having a farm may have them, so far as they are needed. In short, cistern water, is proved to possess all the advantages of cheapness, convenience, and healthfulness over well-water—and may be equally sure, with proper care.

In another number I propose to show to the prairie farmer, equal advantages or substitutes, for the absence of *building* and *fencing* material—as we hope your paper may become peculiarly serviceable to prairie farmers. Yours, D. S. C.

HOW MACHINERY INCREASES BENEFICIAL LABOR.

About five years ago, when sewing machines were beginning to be introduced into this city, some furious attacks were made upon them by ignorant and mock philanthropists, who pretended to be anxiously concerned for poor seamstresses. They pictured the sad fate which awaited those persons; told how the hard-earned bread was to be taken out of their mouths by such capitalists as could purchase and use such machines, thereby dispensing with the labor of needlewomen, and thus bring them to want for lack of employment. Have such predictions been fulfilled? We who have for years carefully watched the effects of labor-saving machinery of every kind upon society, knew that such ideas, when uttered, were no better than the emanations of an idiot's dream, trusted to a few years' experience to prove the benefits of such machines to every class in the community. Thousands of such machines are now in operation in our country, and if we are rightly informed, more than a thousand of them are in operation in New York City alone; but instead of these having thrown any industrious females out of employment, they have rather increased the quantity of work for them to do. We were told a few days since, by one engaged somewhat extensively in providing needle work

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that twenty stitches are now made on some garments, for one that was made five years ago—in short, that sewing machines had greatly increased the demand for sewed work. Thus coat linings, which used to be made plain, are now mostly elaborately worked, and finely stitched, and it is the same with almost every kind of sewed work. The amount of such work, he stated, had increased even in a greater ratio than the machines to execute it. A higher taste is now being gratified, and hundreds of women who used to ply the needle early and late with their fingers, for a mere pittance, are now better remunerated for their labor in attending sewing machines, while, at the same time, their hours of toil have been measurably reduced. It is our opinion that the very class—needlewomen—respecting whom so much was at one time said about being injured by sewing machines, will be the most benefitted. In many, if not in almost every instance, this has been felt to be the case already. Sewing machines, therefore, which are but a recent invention, afford abundant examples "how machinery increases beneficial labor." [Scientific American.

THE PROSPECT FOR PRICES IN 1856.

The Baltimore American says: "Some of the Southern papers are urging the farmers to put as much of their land as possible to wheat seed. The Lynchburg Virginian holds that wheat seeding in that state may be continued as late as the middle of December, as excellent wheat has often been made east of the Blue Ridge, from December seeding. That high and remunerating prices in grain will prevail next year, the Virginian considers beyond a contingency, and yet, it adds, we do not believe from information received that an increased breadth of land, at all commensurate with the prospective demand for and price of breadstuffs, has been put to seed in this portion of the State.—Taking the lowest estimate of the deficiency of grain in England and France, the deficit for the two countries may be put down at fifty-two million bushels. As this deficiency must be made up before the next harvest, the question arises, whence are these supplies to come? It has been ascertained that the crops of wheat and rye throughout the whole of North Europe also are deficient, and especially in the Baltic provinces and the interior of Germany where flour is at this moment selling at 70*s.* per sack. In fact, the importations of breadstuffs from these sources and all others, except the United States, including Denmark, Sweden, Spain, Portugal, Italy, Egypt, will hardly be sufficient to meet the deficiency of 20,000,000 bushels in France. Canada and the Baltic provinces are not relied on for more than six or seven million bushels, and Italy—from which the exportation of bread-stuffs has, in fact, been prohibited—together with Spain, Portugal, Egypt, and the provinces of the Danube, can scarcely do more than furnish the balance of thirteen or fourteen millions, of the deficit in France. Hence, giving the surplus from these sources to France, there still remains the vacuum in England, ranging from a capacity of thirty to fifty millions of bushels to fill. For this supply the English importers can only look to the United States; and if the supply say forty million bushels, be obtained from this country, we shall send more grain to England than was exported in wheat and flour to all parts of the world during the year 1855. Our exportations for that year, according to the New York Economist, amounted to less than twenty-nine million bushels. The quota exported to England, according to the English Board of Trade returns, was an average of 978,930 quarters, or less than eight million bushels per annum for the eight years from 1845 to 1853, inclusive.

"If, then, as has been assumed, the whole available surplus exported last year from the United States to every part of the world should be supplied to England, there of course will still remain a deficit. And even should we be able to export this required amount, we shall be, as last year, without a surplus for home consumption at the close of the season, and paying for that purpose prices as high as in Liverpool. In conclusion we will merely add the following important fact, as stated by the Virginian: Our harvest is, on an average, a month in advance of the harvest of Europe, and will consequently come in next season just at that period when a deficiency will be most sensibly felt abroad, and, in fact, when prices ruled by actual want, must be irrespective of the prospects from English or continental harvests."

It is now quite too late in the season to talk about increasing the wheat crop of 1856. The extent of that matter was determined weeks ago. But the corn crop of the United States is more important than that of wheat. Besides the corn and meal exported, we put the worth of a few millions of dollars into pork, beef, lard, etc., much of which comes from corn.

Between this and planting time next spring our farmers may calculate their chances for prices, and plant accordingly. There can be little doubt however, but what every species of grain and other agricultural produce will bring high prices for at least two or three years to come, and how much longer no one can predict with any degree of certainty. It will be perfectly safe for farmers to put in the coming spring all the corn they can man-

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age. Spring wheat for home consumption may also be grown with profit. Barley, oats, peas, beans, etc., will also insure good returns, and will supply the place of winter wheat in many families. Therefore if our farmers are vigilant, and get all things ready for extensive spring and summer crops, the whole country will be greatly benefitted, and the Old World supplied with Bread.

STEAM PLOWING.

It seems, from the subjoined article, which appeared in a late number of the Portland Advertiser, and which we copy from the Maine Farmer, that plowing by steam has at last proved entirely successful. It may not be extensively used at present, as a means of mellowing the earth but, "wait a little longer" and plowing engineers will take the place of the plow-boys, and the steam whistle be heard instead of the *whoa haw*.

"A reporter in the Baltimre Commercial Advertiser, of Nov. 3, 1855, says: 'After testing the speed of the horses, the track as well as the ring was cleared for a trial of the steam plow. Four large turf plows were attached to it, and it moved off, throwing up furrows each about fourteen inches deep.—The work was well done, and it was the opinion of many farmers present that it was admirably adapted to the breaking up of prairie land. The machine is too heavy for the land in this section of the country, but the principle is a good one, and will lead to improvements which will make the steam plow the means for tilling the soil with profit to the farmer. * * * * *

"'Awarded to Obed. Hussey for steam plow, the highest premium and a diploma.

"Mr. Hussey, the inventor, is a native of Maine, and formerly resided at Port a n'.

"He was the first inventor of mowing and reaping machines, and also of several other important inventions.

"From a private letter of Mr. Hussey's to a friend of his in this city, we learn that the power of his latest invention was severely tested, and pronounced completely successful and practicable. He says: 'One farmer declared that forty horses could not have drawn the four plows so deep through such soil at such a rate; another, that it would have required four yoke of oxen to draw one plow; but the committee have kept within bounds in their report, in which they called the draught equal to that of sixteen horses.—The machine steamed out to the show ground a distance of two and a half miles over a road somewhat rough and hilly. It was generally predicted that the experiment would prove an entire failure; but its final success was greeted by the assembled crowd with a hearty enthusiasm and loud and prolonged cheering.'" [Portland Advertiser.

MAKE FARM LIFE ATTRACTIVE.

"Why do your young men run as by some universal instinct, from the farm where they were born to the city, where they so often learn to wish they had not been born anywhere? Chiefly—whatever explanation they may put forward as having a handsomer look—chiefly because on the farm there is supposed to be an inevitable doom to hard, monotonous, wearing bodily toil, from daylight to sundown, life through, with no room for intellectual expansion or generous tastes, or social recreation; and secondly, because after all this labor, the farmer makes too little money. Nor will my faith in young men's natures suffer me to believe this is always a sordid calculation with them. For, in thinking of money they think of it oftener as a means than an end. They want it for what it brings. On the farm, frequently, are rooms without books, walls without pictures, manners without grace, clothes without fitness, and grounds without shaping or ornament. On the contrary, the city merchant buys a library and works of art, sends his children to school where they learn to move with elegance as well as to cipher and parse, gets garments that are finer and fitter, and is not so exhausted physically at nightfall as to prefer sleep to any company of books. He comes back into the country and lays out a beautiful estate, sometimes with statlier animals and more select fruits, and tidy fences and hedges, and more blooming fences on it than his neighbor, who has all the while been staying there and making farming the business of his life. Now it would be a hard task in persuasion to convince most young men that these things are not good, nor desirable, and that the dollars which command them are not of the nature of an advantage. I confess I should be a bad subject for such persuasion myself. Besides, these things are all of the nature of picture work; the boy cannot help seeing them; they work upon him while he stops on his way from pasture under the fragrant shrubbery, or peeps through the pickets at the mellow peaches and pears.

I know perfectly how apt his sanguine blood, and his ignorance of the ninety odd failures in a city for every single success, are to put a fallacy into his plans and cheat his choice. But none the less is it true, that he goes to the city for a chance, though but a chance, for certain means of refinement, liberality, and width in the whole style of life, such as scarcely a mere farmer about, in the old way of farming, has displayed. Whoever knew a confident and chivalrous youth to doubt he should be one of the five to succeed though five hundred fail? And, moreover, many young men at that aspiring period of life, before the charm and glory of

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early ideals have faded off, thirst honestly for more stimulous to mental action, more enlarging ministries to thought, than they have found in rural places. This they dream of finding in the presence of crowds and the sharp collisions of traffic. Perhaps they dream delusions,—but this is the feeling. Depend upon it, if you would hold your sons and brothers back from roaming away into the perilous centres, you must steadily make three attempts—to abate the task-work of farming, to raise maximum crops and profits, and to surround your work with the exhilerations of intellectual progress. You must elevate the whole spirit of your vocation for your vocation's sake, till no other can outstrip it in that which most adorns a civilized State." [Address of D. F. Huntington.

PROPAGATION OF FISH.

Information of the highest importance on the artificial propagation of fish was laid before the late meeting of the British Association. Experiments with salmon, made at Perth, Scotland, have been extremely successful. Three hundred boxes were laid down in twenty-five parallel rows, each box partly filled with clean gravel and pebbles. On the 23d of December, 1853, 300,000 ova were deposited in the boxes. On the 31st of March, 1854, the first ovum was observed to be hatched, and in April and May the greater portion had come to life, and were at large in the boxes; in June they were admitted into the pond, their average size being about an inch and a half in length. From their admission to the pond the fry were fed daily with boiled liver, rubbed small by the hand. By spring of the present year they had increased in size to the average of three and four inches in length. On the second of May a meeting of the Committee was held at the pond, to consider the expediency of detaining the fry for another year or allowing them to depart, but it was thought they had not assumed the migratory dress till the 19th, when the sluice communicating with the river Tay was opened, and every facility for egress afforded. Contrary to expectation, none of the fry manifested any inclination to leave the sound until the 24th of May, when the larger and more mature of the smelts, after having held themselves detached from the others for several days, went off in a body. A series of similar emigrations took place until full half the fry had left the pond, and descended the sluice to the Tay. It has long been a subject of controversy whether the fry of the salmon assume the migratory dress in the second or third year of their existence. So favorable an opportunity of deciding the question as that afforded by this experiment, was not to be overlooked,

In order to test the matter in the fairest possible way, it was resolved to mark a portion of the smelts in such a manner that they might easily be detected when returning as grilse. A temporary tank, into which the fish must necessarily descend, was constructed at the junction of the sluice with the Tay; and as the shoals successively left the pond, about one in every hundred was marked by the abscission of the second dorsal fin. A greater number were marked on the 29th of May than on any other day, in all about 1200 or 1300. The result has proved highly satisfactory and curious. Within two months of their liberation, twenty-two of the young fish so marked when in the state of smelts on their way to the sea, have been, on their returning migration up the river, recaptured and carefully examined; the conclusions arrived at are most gratifying, and proved what has heretofore appeared almost incredible, the rapid growth of young fish during their short sojourn in the salt water. Those taken first weighed 5 to 5 1-2 lbs., then increasing progressively to 7 and 8 lbs., whilst the one captured on the 31st of July weighed no less than 9 1-2 lbs. In all these fish the wound caused by marking was covered with a skin, and in some a coating of scales had formed over the part. The experiment has afforded satisfactory proof that a portion at least of the fry of the salmon assume the migratory dress and descend to the sea shortly after the close of the first year of their existence; and what is far more important in a practical point of view, it has demonstrated the practicability of rearing salmon of marketable value within twenty months of the deposition of the ova.

There can be no doubt that the quantity of salmon (as well as other fish,) may be enormously increased by the artificial breeding process, and we regard the experiments of great importance. At Cleveland, Ohio, success has attended the first experiments of Dr. Garlick and his coadjutor, who may do a vast deal for their fellow men by fully populating our western lakes. In the salmon regions, east and west, the subject deserves attention. And there is little doubt that in neighboring rivers, where salmon are now unknown, they might be thus successfully introduced. How much more useful would it be if some of our sportsmen would take up the subject, instead of devoting their hearts, bodies, and time to the poor enjoyment of shooting useful birds!

[Horticulturalist.

THE FRUITION OF LIBERALITY.—It goes a great way toward making a man faithful to let him understand that you think him so; and he that does but suspect that I will deceive him, gives me a kind of a right to cozen him.

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TURKISH WHEAT.

There have been received at the Patent-office one hundred bushels of Turkish flint wheat, procured by the United States dragoman of Constantinople from the foot of Mount Olympus. This wheat has already been tested in Virginia and Maryland, and has proved both hardy and productive. It possesses in a remarkable degree the quality of long keeping, as was indicated by a sample shown us which was brought to this country by Captain Porter, of the navy, four years ago. We learn that the Sultan takes a lively interest in the affairs of this country, and has intimated that there are other wheats in his dominions which would be highly desirable for our government to obtain.

A plan has been suggested—which would undoubtedly prove highly advantageous to the agricultural interests of this country—of importing large quantities of wheat from the shores of the Mediterranean and Black Seas for supplying our farmers with seed at about the cost of the original purchase, freight, etc. It has been proposed that the storeships of the navy, which usually return from the Mediterranean in ballast, be freighted with seed-wheat, purchased by government, and sold to agriculturists at a nominal rate, on condition that they shall cultivate the same, and report the result to some proper authority, by whom the excess of cost may be refunded to them.

We understand that wheat of an excellent quality can be purchased at Constantinople, under ordinary circumstances, for less than half the usual price in the Atlantic markets and in the United States. If this be true, it would be cheaper and more profitable to the farmer in the end to sell his own, and purchase his seed-wheat from abroad, as the change of soil and climate would often cause his crop to mature earlier, and give an increased yield.

GOLD AND AGRICULTURE.

In the course of a speech recently made by the Hon. Edward Everett, he made a beautiful allusion to the value of the corn crop of the country as compared with the products of the gold mines of California. The idea has been carried out still more practically by the Rev. Samuel Osgood, the Corresponding Secretary of the New York Historical Society. At the last monthly meeting, he presented a copy of the New Year Book of Agriculture for 1855 and 1856, as prepared by Mr. David A. Wells, and he accompanied it with this statement:

"I might remark upon the cheering views of the festive life now connecting itself with agriculture, and making the Autumn season a time of great intellectual, as well as social interest among our farmers and their friends; but this subject deserves more extended treatment in connection with the traditional social customs of our people, and the prospects of embracing and enlivening old customs by generous historical associations. Having made these hints, I will present two tables of facts—the first of which I gather from reliable financial authority in this city, and the second taken from Well's Year Book:

I.—Statistics of California Gold.

Previous to the discoveries the gold in the United States was	$86,000,000
From California in the years 1849–'54	291,000,000
To date in 1855	45,000,000
Imported, in six years, from elsewhere	33,000,000
Total	$455,000,000
Remitted abroad in six years and ten months	241,000,000
Left in the country	$214,000,000

II.—Estimate of the Harvest of 1855.

Wheat, bu.,	from 168,000,000 to 185,000,000
Indian Corn,	1,000,000,000
Oats,	400,000,000
Rice,	250,000,000
Rye,	from 16,000,000 to 18,000,000
Barley,	7,500,000
Potatoes,	115,000,000
Beans and Peas,	9,400,000
Sugar,	lbs., 545,000,000
Cotton,	bales, from 3,200,000 to 3,500,000
Hay,	tons, 15,000,000

"Now, comparing the above products of the soil with the yield of California gold, above presented, the result is not a little remarkable. It will be seen that our crop of Indian corn, if we value it at but half the present market price, amounts to more than all the gold from California; and that our wheat crop, at the most moderate estimate, is worth as much as all the gold now in the country; while the moderate growth of oats, with all reasonable allowance for exaggeration, more than equals any two years' produce of the California mines."

WHY BUTTER IS DEAR.

Is the following, from a New York city paper, true or fabulous?

"There is a fine pasture all over the country now, and the price of butter ought to be down to a shilling a pound. Why isn't it? Because the women and girls don't know how to make it. For twenty years past the girls' butter-making education has been sadly neglected. They can play the piano, but cannot churn; can dance but cannot skim milk; can talk a little French, but don't know how to work out the buttermilk. The women who made the butter in Westchester, Dutchess and Orange Counties some twenty years ago, are passing away, and there are none to take their places. That's why butter is high."

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PLAN OF A CHEAP FARM HOUSE—COSTING FROM $800 TO $1000.

In treating on the subject of farm buildings, and domestic architecture generally, we shall aim to be as practical as possible; and in presenting plans for houses, barns and other buildings, make it a point to adapt ourselves to the circumstances of a new country.

Instead of parading fancy plans of houses, with Gothic towers, swelling fronts, and ornamental windows, merely for the sake of a fine picture, and costing from five to twenty thousand dollars, it shall be our aim to offer such plans as come within the scope and means of common farmers, mechanics, and business men. Houses, for instance, costing from $500 to $5,000, and combining all the conveniences practicable with a sufficient amount of ornamental, for their style and circumstances, We consider most works on architecture liable to the above objection; their plans are apt to be altogether too fine, and consequently too expensive.

The plan herewith presented is intended for a cheap farm or village house—without any pretensions to elegance—aiming merely at neatness, economy, and convenience, and being such an one as any farmer who is comfortably started can afford to build. In its ground plan are embraced a parlor, a dining or sitting room, a kitchen, a family bed-room, and the requisite closets, and pantries—making up just what is actually needed in the living story of every house, and nothing more. There is no extra parlor, calling for expensive furniture and fitting, to be shut up dark and useless—for three hundred and sixty-four, out of the three hundred and sixty-five, days of the year—simply to gratify female vanity.

Such parlors can better be afforded, (if they must be had,) by and by, than at present. We also dispense with a main hall, in a small house, as they take up a deal of room, and are inconvenient to cross in going from one part of the house to another. The portico makes a good front entrance in summer, and can be fitted with shutters, so as to be closed in cold weather, and thus answer all the necessary purposes of a hall. It will be seen that the chamber can be approached from the parlor or sitting room. Also, the family bed-room, from either parlor or sitting room. In the chamber, there are five good sleeping rooms—two of them parlor size. We think it will be hard to devise a small house more connected, convenient and roomy, and costing no more than this.

We shall, from time to time, present additional plans of houses and buildings, ranging

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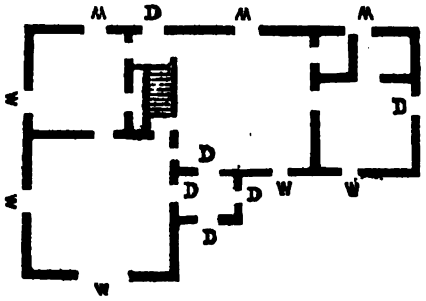
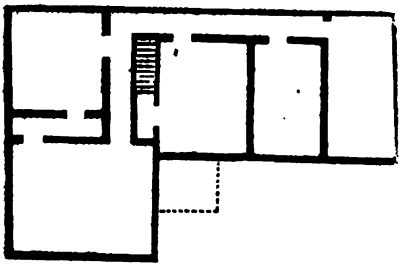


GROUND PLAN.

from low to high prices, and in the variety, so far as we can, fit all tastes. Among others, we propose to offer a plan of a school house, at an early day; with such suggestions as seem appropriate on that subject.

DESCRIPTION—Front room in the main story, for parlor. Family bed room, immediately in the rear of parlor. Dining-room, in the wing. Kitchen, at the end of the dining-room. Pantry, in the kitchen, and dish closet opening into the dining-room. Chamber, divided into two parlor bed-rooms in front building, and three bed-rooms in the wing.



CHAMBER PLAN.

PENNSYLVANIA COAL.—The whole amount of coal sent from the anthracite regions this year was about 6,400,000 tuns—an increase over 1854 of 700,000 tons. It is believed that Pennsylvania has realized about $19,000,000 for these black diamonds. In the course of twenty years from this date, the coal of Pennsylvania will realize yearly more money than ever was obtained in a single year from the golden fields of California.

[Scientific American.

A MORMON GRASSHOPPER.—"A grasshopper from Utah was exhibited in New York last week, which measured five inches in length!" No wonder they had short crops in that Territory.

THE OAK TREES OF WISCONSIN.

BY I. A. LAPHAM, OF MILWAUKEE.

The forest trees of our country are worthy of much more attention than they usually receive, not only from the cultivator but the artizan and statesman. Your remarks in the Wisconsin Farmer on this subject are very important; and if you succeed in awakening a general interest in the subject you will surely have "done the state some service." Our successors at least, will have cause to honor and respect the forethought that preserved and handed down to them their full share of this great source of national wealth—the forests. The dense forests have a decided effect upon the climate of the country, in various ways. They protect our houses, and our cattle from the rigors of the north winds in winter, and from the fierceness of the burning sun in summer. They preserve the moisture of the ground, and by the annual fall of their leaves, they restore to the soil those elements of vegetable life that would, without this natural process, soon become exhausted, leaving the soil barren and unproductive. Trees, besides being useful, are ornamental—they enter largely into the material of the landscape-gardener. Desolate indeed would be our dwellings were their environs entirely treeless. They are associated with our early recollections, and become in a great degree companions of our lives; and we unconsciously form strong attachments for such as grow near our homes—thus increasing our love of home, and improving our hearts. The various uses of wood, in the form of fuel, timber, lumber, rails, &c., are so numerous, and so well known to every body, that it would be useless to enumerate them here. The quantity of wood annually consumed in the United States must be enormous. Few persons can realize its extent or the amount we owe to the native forests for the capital and wealth our people are now enjoying.

Let us then make a study of these noble specimens of vegetable growth; let us see what trees we have in Wisconsin worthy of our attention, and which are deserving of efforts to keep up a supply that shall always be equal to the demand. As the intelligent farmer strives to supply annually to the soil (by manures or otherwise) the exhausted ele-

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ments, so he should provide for an annual growth of wood that shall be at least equal to the amount consumed.

In giving some few details in regard to the forest trees of Wisconsin, we propose to begin with the most important—the OAKS, of which eight species have been observed. We give below the characters by which they may be distinguished from another.

2. Q. *ALBA*—WHITE OAK.

1. *Quercus alba, Linnæus*—THE WHITE OAK.—This species is known from the others by its light colored bark, (whence the name;) the leaves are smooth, pale or glaucus below, bright green above, obliquely and deeply cut into (from three to five) oblong-linear entire obtuse lobes; the acorns are oblong, much longer than the hemispherical cup. This is the most valuable of our oaks, and at the same time one of the most abundant.

2. *Quercus obtusiloba, Michaux*—POST OAK.—The leaves of the post oak are downy below, pale and rough above, sinuately cut into five to seven roundish divergent lobes, the upper lobes much the largest, and often with one, two, or three notches. The acorn is ovoid, about twice the length of the hemispherical cup. This tree is rare in Wisconsin.

3. *Quercus macrocarpa, Michaux*—BURR OAK.—Readily known from all other species in the State by the mossy-fringe around the border of the acorn cup. The leaves much resemble the last, though usually narrower, and of a much brighter and more silvery color below. A very common tree in the woods, and forming most of the "openings."

2. Q. *OBTUSILOBA*—POST OAK.

4. *Quercus bicolor, Willdenow*—SWAMP WHITE OAK.—Resembles the white oak, but is only found along the borders of marshes or wet grounds. It may always be known by its ob-

2. Q. *MACROCARPA*—BURR OAK.

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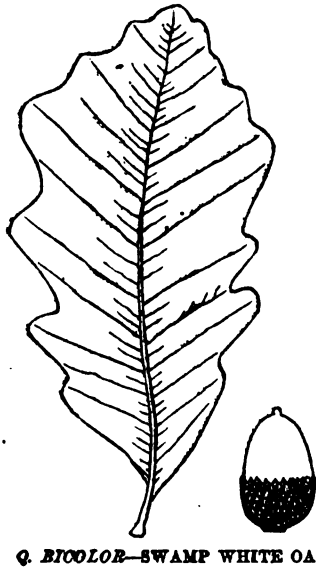
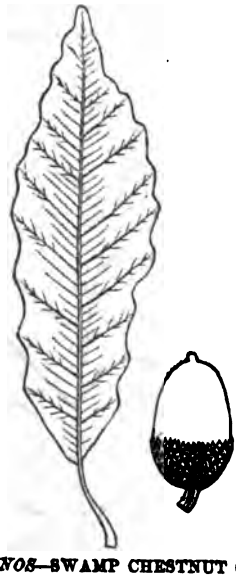


4. *Q. BICOLOR*—SWAMP WHITE OAK.

long or obovate leaves, coarsely and irregularly sinuate-toothed but not lobed; they are wedge-shaped below, and on short stalks. This species is not very abundant in the State.



5. *Q. PRINOS*—SWAMP CHESTNUT OAK.

5. *Quercus prinos, Willdenow*—SWAMP CHESTNUT OAK.—The leaves resemble those of the chestnut tree, (whence the name,) being obovate, acute, downy beneath, coarsely serrate with nearly uniform rounded teeth; not lobed. The acorn is large, in a somewhat top-shaped cup. This is quite a rare tree in Wisconsin.

6. *Quercus coccinea, Wangenheim*—SCARLET OAK.—So named on account of the beautiful scarlet color the leaves assume in autumn. The general outline of the leaf is oval, deeply sinuate-pinnatifid, with broad and open sinuses, reaching two-thirds the depth to the mid-rib, smooth bright green and shining on both sides, broad and truncate at the base.

6. *Q. COCCINEA*—SCARLET OAK.

The acorn is globular-ovoid, about one-third hid in the very scaly cup. This fine tree is rare in Wisconsin. First detected near the farm of Mr. HUNTINGTON, in the eastern part of Dane County.

7. *Quercus rubra, Linnæus*—RED OAK.—The leaves of the red oak are obovate in outline, smooth, pale below, sinuately cut, with rather narrow sinuses into short, acute, spreading lobes. The acorn is oblong-ovoid, much longer than the flat, saucer-shaped cup. Probably the most abundant species, especially in the thickly wooded districts of our State.

8. *Quercus palustris, Du Roy*—PIN OAK.—This is our most beautiful and graceful oak tree; the leaves are oblong, smooth, shining, bright green on both sides, standing on long petioles, so that they are wafted about by every wind that blows. The sinuses of the leaves are very broad, deep and rounded, the lobes divergent, acute, cut-lobed and often

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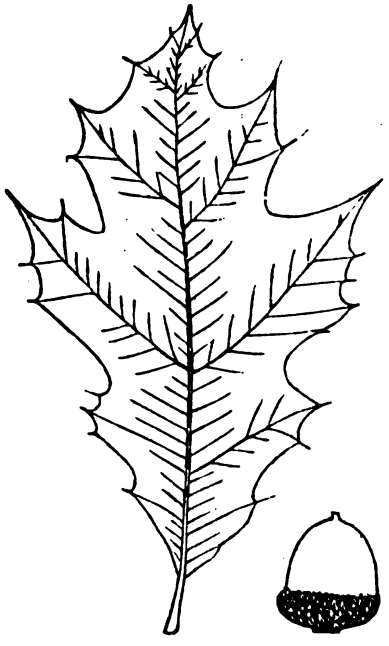
toothed. The acorns are small, nearly globular, about half covered by the cups. The bark is black and much cracked into little ir-



1. *Q. RUBRA*—RED OAK.

regular squares. The pin oak (often improperly called black oak) is quite common, especially in the borders of prairie openings.

By aid of these distinguishing characters and the accompanying figures, any intelligent person can readily make out any of the oaks of Wisconsin. It is probable that there are other species known to some of the readers of

Q. PALUSTRIS—PIN OAK.

the Farmer within our borders, and if so, I should be glad to have for examination a few specimens of the full grown leaves, and the acorns, as they grow on the stem, plucked when fully ripe. The leaves should be placed, between some old newspapers, and subjected to a moderate weight or pressure, to prevent wrinkling. If the weather be damp, the papers should be changed two or three times until the leaves are perfectly dry. Any of our wild plants and flowers may be preserved in the same way. The following species of oak are found in neighboring States, and some of them may therefore be looked for in Wisconsin:

Quercus olivæformis, Michx,—Mossy over cup oak;

Q. castanea, Willd,—Chestnut oak;

Q. prinoides, Willd,—Dwarf oak;

Q. imbricaria, Michx,—Laurel oak;

Q. nigra, Linn,—Black Jack oak;

Q. tinctoria, Bart,—Black oak;

Q. Leana, Nuttall,—Lea's oak.

The oaks are not only among the most useful, but they are also among the most ornamental of the native forest trees. In their young state they have the properties of lightness and elegance; at greater maturity they possess majesty and even grandeur. In the close woods they do not naturally show their full and proper developement, on account of their crowded condition. But in the oak openings we see them with spreading arms, shading a large extent of ground and presenting beautifully rounded forms to the eye. The foliage of the pin-oak is peculiarly light, beautiful, and ever moving. The silvery under surface of the large leaves of the burr-oak is turned up by a gentle wind, and gives its brilliant hues to the landscape.

It has been recently stated (with how much truth I know not) that acorns should be planted on the surface of the ground. They should be covered with leaves, held down by small stones. The oak trees cannot be transplanted without great care and skill; but their growth from the seed is quite rapid. They spring up naturally whenever the annual fires are kept from spreading over our prairies and openings, and soon form dense woods.

The accompanying illustrations are one half the natural size, and are from actual specimens in my Herbarium.

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GEOLOGY---APPLIED TO AGRICULTURE.

MESSRS. EDITORS—It was a purpose in my last to show some of the natural processes to which soil owes its origin. As communications have to be brief, I purposely omitted noticing the great rock-crushing, or soil-producing epoch—the drift. It will be the purpose of this article to point out some of its peculiarities, and obvious effects in fitting a large portion of this continent for the sustenance of vegetable and animal life—as well as of alluvial agencies in modifying and finishing the process.

The most striking features of the drift deposits are the hills of sand and gravel found over the whole eastern slope of Wisconsin—and the numerous erratic bowlders, or hardheads, so commonly met with. On the western side or slope of the state, and doubtless over much of Iowa, it is found developed in vast beds of clay, gravel and sand being of rare occurrence. The origin of this formation is very properly referred to the action of oceanic currents, ice-floes, icebergs, &c. It was a recent event in Geology—the last great change which rendered the earth fit for the habitation of man—an apparent preparation for his coming. It happened after the continent had taken its present general form, and its great rivers had marked out their present valleys.

Passing over the causes of this general disruption, let it suffice to glance at some of its effects in this western country. All the stratified deposits in Wisconsin have a slight inclination to the south and east, and some towards the west The primary or igneous rocks are developed in place at the north, more especially about Lake Superior—that great seat of ancient volcanic disturbance—rising even into mountainous slopes. Diluvial forces swept over the state from the north-east, as is abundantly evident. It broke up, to a greater or less extent, all the rock formations over which it passed, bearing along the fragments, which were worn and ground together, and thoroughly incorporated and intermixed, as we now find them. All the mineral elements in Nature's great store-house were thus brought into intimate connection, and each has contributed in some way to form the existing soil. Mixed with the pre-existing lime and sandstones, vast areas of which were ground to dust, are now found the granites, shists, porphyrys, and traps of the far north—with fragments of their metalic lodes—iron, copper, &c., in a condition more or less comminuted or powdered.

We find almost everywhere the rocks crumbling into soil, and a chemical analysis would doubtless show that our soils are composed generally of the same materials, in about the same proportion as they are found in the rocks. The drift epoch, in bringing together, pulverizing, and intermingling the ingredients of the most distant and opposite formations, rendered possible those affinities and chemical changes essential to an agricultural soil, and without which it would never have acquired its present capacity for productiveness.

In using the term *soil* in these articles, I ought perhaps to say here the word must be taken, generally, in its larger and more comprehensive sense. An agricultural soil, properly, is the product of a series of endless chemical combinations and re-combinations of the materials upon the earth's surface. It is the province of chemistry, not geology, to analyze and explain these.

With the close of the drift period, and the gradual elevation of the surface above the waters of the ocean which submerged it, a condition was reached, fitting it for the abode of vegetable and animal life. Of what forms or species the first flora consisted we are left in some doubt. That they differed materially from the present, is well established. The altitude of the surface at first, was little above the surrounding waters, and, as a consequence, enjoyed a climate nearly tropical. With each subsequent elevation came new conditions; and we are bound to presume, a vegetation fitted to the existing climate. A higher altitude, and a temperature permanently lower, would necessarily dwarf or destroy a tropical flora. Our present indigenous vegetable forms could only have possessed the country when it had obtained its present altitude, and general conditions of climate.*

*Few, unacquainted with the proof, will be prepared to believe that this north-western country, where the temperature falls at times 28 degrees below zero, and the general average of the year is but little above that of New England, ever, at any period, had a climate tropically warm. The fossil bones of the elephant, and other animals of similar habits and physical natures, dug from the drift of Wisconsin, however, fully establishes the fact. It would form a curious and attractive chapter, if these

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Alluvial agencies have done most to create and enrich the surface soil. These agencies are understood to be those which have operated since the drift, or during the present period. In a general sense, all soils are referred to this cause, since they have been changed, moved and modified more or less by them. Thus the deposits of our rivers—the wash from higher to lower levels—the deposits in low grounds and marshes, are all alluvial. Throughout the north-west, a very important result of these changes to the agriculturist have been the extensive deposits of marl, peat, &c. Our marshes are the great reservoirs of these fertilizing substances. The decay of molareous animals, and the deposition of carbonate of lime, in these numberless natural reservoirs or basins, mixed with fine black mud and clay found beneath the surface sod, (the decomposition of which has produced it,) has placed within the reach of every farmer, the means of restoring his fields when they shall have become exhausted; or, what is better, preventing that exhaustion by timely applications, with an increased product for his labor. This "muck" is Nature's manure heap.

As these articles can only treat in general terms of the subject to which they relate, and it is but a step from geology to the kindred sciences—especially that of chemistry—occasions will often arise where they will be somewhat confounded together After noticing briefly the origin of soils—unsatisfactorily to myself from the necessity of brevity—the reader must not feel surprise at the *heading*, if subjects it would not indicate are frequently introduced. Agriculture may emphatically be said to embrace within itself the fundamental principles of every natural science. In the main, however, the *subject* will be adhered to. Yours, H. A. T.

evidences were collected and arranged, so as to be readily comprehended by the mass of readers. Almost every week turns up some new evidence, as settlements and improvements progress.

Maine now boasts of owning a fleet of merchant vessels valued at fifty millions of dollars, and greater than the commercial marine of any European power, Great Britain alone excepted.

The Illustrated London News says that Nebraska Territory is a tract of several millions of acres lately purchased by the Americans from the Musquito King.

THE POTATO OF THE FUTURE.

A correspondent of the New York Tribune makes the following announcement:

"Sir: about a year ago I conceived the idea of producing the mammoth size of the petrified remains of plants, which we meet with in the study of geology, by means of an excess in supply of carbonic acid. I constructed an iron vessel, in which I generated carbonic acid gas by means of drenching limestone with vinegar. This I infused into the soil in a flower-pot in which I planted a potato. I did this daily; also I put the flower pot into an iron vessel filled with the carbonic acid, and covered to prevent diffusion. At the end of about six months the plant reached the height of four feet, and bore a pale blossom. In a week more the pot was split. I took out the plant, and a single potato (beside the remains of that I planted,) of about eight inches in diameter, was at the root. By planting this and treating it in the same manner, I hope to obtain potatoes of the size of a barrel.

"I remain very truly, yours,

DR. A. AINSWORTH.

"P. S.—Until now I never ventured to lay this matter before the public, but I am now fully convinced the soil may be rendered very prolific by manuring with limestone soaked with an acid. A. A.

"Haverford, Penn., Nov. 23, 1855."

FOOD FOR FOWLS DURING WINTER.—Fowls must have a variety of food. Boiled potatoes mashed up with corn and oat meal, and fed warm, make a healthy and nutritious food. Unground oats, especially poor, light oats, are almost worthless as food for all kinds of poultry except geese. Fowls will eat them only when they can get nothing else, at least this is our experience. Buckwheat this year is a cheap food for fowls, and may be fed to them without grinding. If you live in the city, buckwheat and corn, with a few scraps of meat, cabbage, &c., will be your cheapest food, unless you can get light or damaged wheat, or "screenings" from the mills or farmers.

LONDON THE GREATEST CITY.

This is now the greatest city in the world, and far surpasses all the great cities of antiquity. According to Gibbon, the population of ancient Rome, in the hight of its magnificence, was 1,200,000; Nineveh is estimated to have had 600,000; and Dr. Medhurst supposes that the population of Pekin is about 2,000,000. The population of London, according to recent statistics, amounts to 2,500,000, 414,722 having been added to it during the last ten years. The census shows that it contains 307,722 inhabited, and 16,889 uninhabited houses.

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For the Farmer.

WYOMING, Iowa Co., Wis., Jan., 1856.

MESSRS. POWERS & SKINNER—Sirs.—The mail leaves Madison Tuesdays for this office and stops until Wednesday morning at ARENA and reaches this place about noon Wednesday. Last Wednesday, Jan. 2, I sent to the office with considerable expectation of seeing the Wisconsin Farmer. I watched the post boy with considerable interest in anticipating a real feast. But he returned with the sad intelligence, that no paper had arrived. Well I can wait one week more thought I. Yesterday I sent again, with like result. Now I feel quite sure, Messrs. Publishers, that the fault is in Uncle Sam, and I do think, that he is the most worthy of censure of any Uncle the people ever had. He proposes to carry letters, papers and money, for which we pay him a reasonable sum. He must have his pay in advance. After he gets our money, he does just as he pleases. I have known him to be six months in delivering one of my letters. Last mail we received one from Rock co., by way of Madison, in the short space of *three weeks*. How long he will be in delivering the Farmer, I can't say. If we can't do anything with our Uncle, can we not do something with our cousins, who stop our papers just to read them, &c., &c. I have quite a notion of making them a visit, one of these days, when they will have such a cousining as they won't like very well.

Very truly yours,

B. C. CHURCH.

We would say to our friend CHURCH, that the Farmer was duly mailed, but probably took a *wrong* road. If anybody stole it, we hope they will read it; being sure that its tone and spirit will be calculated to reform and make good men of them, after which they will be apt to become subscribers; and perchance get us up a good club in their neighborhoods. Rogues will find the Farmer a dangerous thing to steal. EDS.

WASTE NO TIME.—Enjoy life moment by moment. Let not an hour pass in which you do not catch one pleasing impression. See the sunlight lying in golden shafts upon the carpet at your feet. Enjoy its splendor.—Let your mind revert to the wonder that the sun performs on its ceaseless round—this movement warming the heart of the shrouded vegetation that shall spring up to life, giving joy in its turn to others.

For the Farmer.

PORTAGE, Jan. 9, 1856.

MESSRS. EDITORS—Allow me to express my sincere thanks to you for the publication of the Wisconsin Farmer, and also to solicit from you some information as to the proper cultivation of a garden. The soil is about three inches deep, of vegetable sandy loam, underlying which is a bed of sand more than twenty feet deep, of a quality so sharp as to be used for building purposes. Red and black currants, the last season, were a complete failure; apple trees live, but do not thrive. Good stable manure was used pretty freely. Potatoes were small, corn, pumpkins, tomatoes, and water melons grew tolerably. I should like to raise fruit trees if possible; failing in which, a knowledge of what is most suitable would greatly oblige, Yours, &c.

A SUBSCRIBER.

To make a good garden, under the above circumstances, it will be necessary to draw on muck, and clay, in quantities sufficient to make a soil at least a foot deep—putting the clay on mostly for the first layers, so as to counteract its leeching, as much as possible. After you have once thus made a basis, you can apply manure, ashes, or whatever seems most expedient. To grow trees or shrubs with success, you will need to dig pits for each, from two to three feet deep, and fill them with good soil, or something equivalent to make it. It will be some labor and expense to make up a garden in this way, but still it will be better to go to this expense, than to do without one.

EDS.

TAPEWORM.—The Gazette Medical asserts that the Hebrews are never troubled with it, that pork butchers are particularly liable to it, and that dogs fed on pork are universally so afflicted—in fact it turns out a small parasite worm called *crystice reus*, (from two words signifying a small sack and a tail) which much affects pork, no sooner reaches the stomach than, from the change of diet and provision, it is metamorphosed into the well known tapeworm; and the experiments of M. Kuchenmeister, of Zittora, upon a condemned criminal, have established the fact beyond all contradiction.

LINKED SWEETNESS LONG DRAWN OUT.—A sweet potato has been raised in Bottetour County, Va., this season, which is said to measure five feet eight inches in length, and nine inches in diameter.

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PROTECTING BUILDINGS FROM LIGHTNING.

"If there be one time more than another," says a late writer on electricity, "in which man feels that he is entirely in the hands of One mightier than himself, in which all his personal pride sinks in the conviction of his utter helplessness, it is when the forked bolts of heaven glare about him with frightful brightness, and the dread artillery of the skies stuns him with its deafening peals, and shakes the very earth on which he treads.—Then, I say, it is that his conscience tells him how entirely dependent he is; and how in a moment, the next flash might be to him the instrument of death, without his having the slightest power to arrest his fate. In respect to the other great and irresistable powers of nature, man, in some sort, seeks them out—the lightning's flash seeks out him. It is true, he may go to shores where thunderstorms are less violent, or to others where they are much more violent than in his own land; but, regarding it generally, lightning is no respector of time or place; it was as much known to the ancients as to ourselves; it comes to us, so to speak, 'in season and out of season'—its geographical distribution is less restricted than that of any other of Nature's great phenomena—tempest perhaps, excepted."

With this startling admonition before him let any one of the readers of these observations pause for a moment and count the number of lightning rods in his own neighborhood. Does he hesitate? He thinks there may be one on the village spire, and perhaps another on yon tall chimney; but where else, he knows not. Now he is led to ask, what is the cause of this apparent neglect? Why this consummate audacity in trifling with the eternal laws of nature by erecting monuments and inviting down the fire of heaven, and providing no means of conducting it safely away? The leading reasons for this are, first, the comparatively few accidents by lightning; second, the very recent adoption of lightning protocols; third, the want of confidence in the efficacy of the latter; and fourth, their cost.

Although the extreme magnitude of accidents by lightning cannot be otherwise than recognised by all, and the almost certainty of some one or more buildings being the marked victims at every season, yet each man builds with the chance of his edifice not being the fatal one. Amongst so many, the chances are so much in his favor that he will run the risk; or else he comes to the still more unphilosophical conclusion that, as storm after storm has left him unscathed, so will he forever be safe.

With regard to the comparatively recent discovery of means of averting the effects of lightning, it will be remembered that it was not until the month of June, 1752, that mankind knew what lightni g really was. Then it was that Dr. Franklin first drew lightning from the clouds by means of a kite, and proved its entire identity with electricity, which discovery led him to the construction of lightning conductors. But before treating of these, perhaps it may be interesting to give some of the precautions adopted by the ancients, in order to protect themselves against this "eternal fire." According to Herodotus, the Thracians, in times of lightning, were in the habit of shooting arrows against the sky, to repel it from the earth.—Augustus used to retire into a cave during thunder storms, under the strength of an opinion then prevalent, that lightning never penetrated into the ground more than five feet deep. The emperors of Japan, it is said, possessed a refinement on this mode, by building reservoirs above the caves, into which they retired, and kept them constantly filled with water, in order, as they thought, to put out the fire of the lightning. Augustus, who appears to have been terribly alarmed at this element, used, also, to wear a seal skin cloak during storms, on account of its assumed protecting efficacy. The Romans used to build seal-skin tents, into which the timid retired; and the shepherds of Cevennes, even at the present day, wear hat bands of serpent-skins for the same purpose. Tiberius wore a chaplet of laurel, whenever he dreaded danger from a storm, with a belief that lightning never touched that foliage. And it is a well known fact, that American Indians, whenever the sky wears the appearance of a storm quit their pursuits and take refuge under the nearest beech, with the full assurance that the electric bolts never scathe that tree.

If the ancients were thus industrious to use what, in their ignorance, they thought to be the means of safety against an agent, the nature of which they knew little or nothing, and the action of which they knew still less, how much more does it seem to be the duty of the present generation who both understand it, and the means of averting its effects to avail themselves of the advantages of their knowledge, and employ the remedies they have at their command? Not a year passes without numerous cases of buildings being struck by lightning for want of proper protection, particularly barns, which, in consequence of the humid gasses ascending from the newly-gathered crops, are peculiarly liable to this injury. The neccessity and the value of lightning rods are obvious, and need no further comment.

As scientific knowledge has now obtained its proper rank in our schools, but few can be ignorant of the fact that all matter is divided into two general classes—*conductors* and *non-conductors* of electricity. These names, however, are only comparative, for

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the two classes gradually emerge into each other, leaving the distinctive term merely an expression of degree. For instance, copper ranks very high in the scale of conductors, and air occupies a very low rank among insulators; yet an electric shock will sooner pass through a short interval of air than over a long copper wire. This fact is dependent on a law, the due observance of which can alone insure the efficacy of any protecting apparatus. Another modification in a conducting body, of a comparatively high rank in its *capacity*, which exercises an important influence over its conducting power. Thus, an electric charge which will pass safely and quietly along an ordinary copper wire, will deflagrate and burn up entirely an extremely fine wire of the same kind of metal.

The most important things to be considered in the choice of lightning rods, are, that they should consist of good conducting materials; good capacity; and should have a good connexion with moisture in the earth. In addition to these, the area of their protecting influence should be regarded; the number of rods required for each building; their position in special cases; and the modes of arranging them.

With regard to the *conducting materials* employed in their construction, metal is undoubtedly the best, and the choice would seem to lie between copper and iron. M. Pouillet makes the conducting power of copper from 5 1-2 to 6 1-2 times that of iron; Dr. Priestly makes it 5 times as much; and Professor Faraday 6 2-5 times as much; so that after having determined the sectional area of an efficient copper rod, an iron one of about six times that area will possess the same conducting power. Iron, however, will not make durable and efficient conductors, unless they are entirely coated with silver, copper, tin, palladium, (which possesses 9 times the conducting power of iron,) or gold, in consequence of their liability to rust or oxidate, by the action of the weather.

As to the *capacity* to be given to a rod, it has been decided by common consent, that the *sectional area* of one composed of copper should vary from a circle one half of an inch to three-fourths of an inch in diameter, the larger area being for very tall conductors, and the smaller for shorter ones. And now in respect to the *form of the rods*, it is quite immaterial whether they be square, round, or flat; but let it be remembered that, in all cases, each conductor should be as entire and as straight as possible, presenting a *single point* to the clouds, with the apex tipped with palladium, the most powerful of all conductors of electricity known. A bundle or rope of copper wire has been found to be a very efficient protection against lightning, as has been fully tested on St. Peter's church at Rome all other methods having previously failed.

Of all considerations, the most important is a good *connexion* with the earth, which is so very essential, that without this, all other precautions will be in vain. It is not enough that the conductor enter the earth; for it must penetrate it to some depth, in fact till it reaches the subsoil, where it is well impregnated with water. In order to rednce the destructive action of this moisture, (the oxydation of the metal,) and at the same time to give the buried portion of the conductor every facility for dissipating its charge it is better that the rod should terminate by several branches in a sunken bed of well burnt charcoal, wood-ashes, or spent tan bark.

Another important point to be considered is the *situation and position* in which the rods are to be placed after they are put up.—In all cases, they should be elevated above every other point of attraction, at least *four times the diameter of the area* to be protected; say, in a common sized house, from 10 to 15 feet above the top of the highest chimney or other object extending above the roof.—And, as before intimated, the integrity and upright position of the rods should be maintained, as far as practicable, avoiding, also, all abrupt angles and short turns. If a house, barn, church, factory, &c., be located in the immediate neighborhood, of each other and only one of them be protected, the danger of all the other will thereby be increased. The remedy in such case, is so obvious, that nothing is necessary to be added on that score.

The question now presents itself, How are the rods to be affixed to the building by *conducting* or by *insulating staples?* The unequivocal reply would be, by conducting—not those covered with copal varnish, nor insulated by necks of glass bottles, as has often been recommended by writers on this subject; for, let it be remembered that the flash which may have forced its way through many yards of air, would find no difficulty in passing so slight obstacles as these, if such a direction formed part of the lightning's path previously prepared, or "felt out." It is a well established truth, that if a conductor pass near a mass of metal in tolerable connexion with the earth, the flash will sometimes divide itself between the two channels one portion of it continuing its course down the rod, and the other portion leaving it to pursue the side path. Therefore, in order to alleviate this "lateral discharge," or deviation from the main channel, all suspected vicinal electrified bodies should be united to the conductor itself, by means of metallic wires or bands. Then, if the building is predisposed, by the antecedent inductive action to share with the rod in conveying away the

fluid, let it be done in good sooth, without an explosion—without a *fracas*, as the French emphatically call it.

Conductors should neither be painted nor varnished, as that would diminish their conducting power. If made of iron, they should be coated with metal, as before suggested, and may be erected at either, on both sides or ends of a building, at a distance of about four inches from the walls, supported by iron staples or wooden supports. D. J. B.

For the Farmer.

HORSES' FEET CRIPPLED BY BAD SHOEING.

The plan of dishing the shoe back of the center of the foot, is calculated to compress the heel unnaturally, and if continued will often partially cripple the foot and destroy the easy, independent action of the horse. With some horses it may in fact produce sweeney. Its effect is always bad, and all farriers should avoid it.

I have cured several crippled horses simply by making the shoe level back of the second nail, instead of dishing. It may look like a small thing to many, but let any man crowd his own heel into a narrow shoe and try to walk, and he will then exactly understand the difficulty. A proper regard to it on the part of farriers, would be a great humanity to horses, and benefit to the public.

WM. T. LEE, Farrier.

Oregon, Dane Co., Wis.

THE DOUBLE GIANT MILL.—The mill named above is a late invention of Messrs. S. & S. M. Colburn, of Ansonia, Ct., and is designed for grinding corn into meal, and for grinding corn and cobs into feed. It is an improvement on a mill called the *Little Giant*, which is made with a cone inside a shell, and is turned by horse power, the cone, as a whole, moving with that power in uniform rotation. In the Double Giant the cone is made in two parts; the upper section suited to crack the cob, and moving round as often as the horse turns round the lever; and the lower section of the cone is made to reduce the corn and cob to meal, and turns round eight times to one revolution of the upper section of the cone. Hence, for making meal, the grinding section of the cone goes eight times faster in the Double Giant than in the Little Giant. At the very lowest calculation the mill will do three times more work in the same time than the Little Giant. We have seen it in operation, and know that one horse has ground a bushel of corn in twelve minutes. It is a great invention, and must meet an immediate and extensive sale.

[The Plough, L. & A.

HEDGES.—THE BUCKTHORN.

Very little is known of this plant, at the most, except that it is perfectly hardy. There are said to be some first rate hedges of it in Massachusetts. We have seen a great deal in the vicinity of Boston; but it was usually planted so near to fences of some sort, or so covered with trees and shrubs, that it had no chance to develope what good qualities it really possessed. A correspondent of the Essex Co. (Mass.) Agricultural Society says: "I do not hesitate to pronounce the Buckthorn the most suitable plant for hedges I have ever met with. Being a native plant, it is never injured by the intense cold; it never sends up suckers, nor is disfigured with dead wood; it needs no interlacing, and is never cankered by unskillful pruning."

We may add to the above testimony, (which is confirmed by the experience of all who have given it a fair trial,) that its bark has a quality which repels the attacks of all insects, and its leaves are so unpalatable, that cattle will not touch them. The seed may be had at from seventy-five cents to one dollar per quart. They should be sown in drills from 18 to 20 inches apart, and stand in the seed bed two years. The first year's growth is small. I planted 30 rods hedge two years ago. The plants grow rapidly, and the hedge promises well. For this climate, I consider the Buckthorn much superior to the Osage Orange. C. G.

MILWAUKEE, Jan. 15, 1856.

WHEN TO WEAR INDIA RUBBERS.

We have noticed that many persons in our city wear india rubber overshoes in cold dry weather to keep their feet warm. This is an injurious and evil practice. India rubber shoes are very comfortable and valuable for covering the feet during wet sloppy weather, but they should never be worn on any other ocasion; their sole use should be to keep out water. They should therefore be put off whenever the wearer enters a house, and be worn as little as possible, because they are air tight, and both retain and restrain the perspiration of the feet. The air cannot be excluded from them or from any other portion of the body, for any length of time, without sensibly affecting the health. It is our opinion that no habit tends more to good health than clean feet and clean dry stockings, so as to allow the free perspiration of the nether extremities [Scientific American.

One to-day is worth two to-morrows.

STOCK REGISTER.

WINTER LAMBS AND THEIR MANAGEMENT.

There is no difficulty in rearing lambs in the winter season, provided the ewes are well kept, and have a warm, convenient place for their accommodation, and are properly fed while suckling. There should be prepared, previous to the lambing period, several small pens, about three feet square, with a convenient place for feeding. As soon as the lamb is dropped, it should be placed with its dam in one of these pens and there allowed to remain until it is sufficiently strong to be removed to a larger apartment, which will usually be at the age of two days; but previous to the removal, the lamb should be numbered corresponding to the dam, as the writer believes all good shepherds will have their flocks permanently numbered. This being done, several sheep and their lambs may be allowed to run together, and the small pens again occupied by sheep having young lambs. At the age of two or three weeks, the lambs will need to be fed with roots, oats, wheat bran, &c., for this purpose it will be necessary to have a small pen, adjoining their dams', where they can be kept by themselves, and their food placed in small troughs easy of access and protected so as to keep their food clean, and there will be no further trouble, aside from the annoyance of their bleating for the first few days. They should be allowed the teat three times a day until they are about six weeks old, after which twice is sufficient, and near the time of weaning once a day is all that is necessary.

There are several advantages arising from separating the lambs from their mothers while quite young; first, they will grow faster as they learn to eat much sooner, and can always have a supply of oats, bran, &c., kept by them, which could not well be done if allowed to remain with their dams; second, the lambs are prevented from getting into the racks and damaging the hay, as is always the case if permitted to remain together the whole time; third, it is not uncommon for the lambs to acquire the habit of picking and eating small locks of wool from the legs and thighs of their dams, which is avoided by making the separation. Aside from the above considerations, the lambs soon become gentle, which is of some importance to the flock master. By adopting a course similar to the above, lambs may be raised in winter that will be as healthy and thrifty as those dropped in April or May.

Pennsylvania now produces as much iron as was manufactured in Great Britain thirty years ago, and of a quality that compares favorably with it.

WINTER MANAGEMENT OF SHEEP.

Much of the success of the wool-grower depends upon the winter management of his flock. Sheep are animals which pay their owners better for good care and keeping than any other stock usually kept on a farm; but if fed with a stingy hand, or neglected, if suitable conveniences are wanting, they pay perhaps as poorly as any. The annual loss to the United States, resulting from a want of suitable sheds and other conveniences for the winter accommodation of sheep is immense. The promptings of self interest would seem sufficient to induce our farmers to adopt a better system of winter management. No intelligent farmer at this day will attempt to deny the principle that warm enclosures are an equivalent, to a certain extent, for food; a variety of well conducted experiments have conclusively demonstrated the fact. A large proportion of food consumed in winter is required for keeping up the animal heat, and consequently, in proportion as the apartments are warm, within certain limits, the less amount of food will be required. The other extreme, too close apartments, would be objectionable from the impurity of the air, and should be avoided. Sheep have very little reason to fear injury from this cause. The majority of those in our State suffer for the want of shelter, and a suitable quantity and variety in their winter food. Many flocks are brought to their winter quarters in fair condition, but are fed so sparingly that the growth of their wool is almost wholly arrested during the winter season, the fodder given them being only sufficient to sustain the vital functions.—Under such circumstances the food consumed by them is in fact nearly lost. The owner has received no return in the increase of wool nor in bodily weight; and he will suffer further from a large per cent. of actual deaths before the time of shearing.

With such a course of management the profits of wool growing will necessarily be small. If neither self-interest nor the feelings of humanity will induce the farmer to provide properly for his dependent flock he will find it for his advantage to keep some other domestic animal, and I know of nothing more suitable for such men than the hardy goat. While I protest against the starving system, it would seem hardly necessary to caution farmers against the opposite extreme, too high feeding, which is also detrimental to the health and long life of the animal. While preparing sheep for the butcher, high feeding is necessary and proper but for store sheep and breeding ewes an over amount of fat, produced by high keeping, is decidedly injurious; and, aside from the attending expense to produce this state of things, it has a tendency to shorten the

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lives of the sheep and enfeeble the offspring. The forcing system of feeding brings animals to maturity early, but is productive of premature death.

The proper and the most profitable mode of feeding, for breeding and store sheep, is that which will develop in them the highest degree of bodily vigor. Sheep fed in this manner would endure the fatigue of a long journey, while those high fed would fail from the excess of fat, and the scantily fed from muscular debility. Every wool grower will find it for his interest to provide warm, capacious, and well ventilated sheds for his flocks, with a convenient access to pure water. The feeding racks should be made with good tight bottoms, in order that the chaff and seed, the most valuable part of the hay, may not be lost. Such racks will also answer for feeding out roots and grain, and will avoid the necessity of having an extra lot of troughs for that purpose.

The different ages and classes of sheep should be properly assorted. This classification, however, must be left to the judgment of the breeder. The size of his flock and his conveniences for keeping will determine the extent of the classification. It will be necessary, in all flocks of considerable size to place the strong and the feeble in separate flocks. The breeding ewes should constitute another division, and so on with the lambs, keeping each class and age by themselves.

In regard to the question, How often should sheep be fed? a difference of opinion among good managers exists. While one believes that twice a day is sufficient, another thinks it desirable to feed three or four times; but the most important point, I apprehend, is to feed regularly, whether twice three, or four times a day. The writer feeds at present, hay twice one day; the next, hay in the morning and straw at night, and so on, giving hay and straw alternately instead of hay, and aside from the above, a feed of roots and grain is allowed at mid-day, allowing a half bushel of corn and cob, or oatmeal mixed with two bushels of roots to the one hundred head. As sheep are fond of a variety of food it is desirable to make as many changes as practicable. If allowed constant access to pine or hemlock boughs through the winter, it will be conducive to their health. Salt is also equally as essential in winter as in summer, and should be kept constantly by them. Rock salt, which is imported in large lumps, weighing from 20 to 50 pounds each, is the cheapest and best.—Sheep are not liable to eat it in sufficient quantities as to ever injure them, as they can only get it by licking.

There is nothing of which we are so liberal as advice.

"HAULING" IN OXEN.

Having dealt in and used oxen for the last twenty years, I have frequently purchased those that had become addicted to the vicious habit of "hauling." The cause of this is perfectly simple, and the remedy equally so. The cause of oxen hauling is attributed uniformly to their having been worked in too short a yoke. Hence, the proper remedy is to put on a longer yoke—say, for large oxen, two feet between the inside bow holes, and my word for it, your oxen will not "haul," worked in such a yoke. And here let me add, that it is a great error among many of our best farmers, particularly in the western and more level portions of our State, to work their oxen in too short a yoke. It must be apparent to every observer, that they will work much easier in a long than short yoke. I have purchased a great many cattle of the very best farmers in Monroe county, and in the Genesee Valley, and have always noticed this defect in their yokes, while in the central and more eastern portions of the State, they are obliged to use longer ones. Indeed, how would our Eastern or New England farmers plow on their hill sides with a Monroe or Livingston county yoke on their oxen? If oxen are addicted to "crowding," apply the short yoke.—E. Terry, Waterville, N. Y., in Wool Grower.

HORSE SHOES BY MACHINERY.

On the 19th of December last year, a patent was granted to Robert Griffiths, of Alleghany, Pa., for an improved machine for making horse shoes. Previous to this time, we have had no opportunity of examining into the nature of its action, and the principles of its construction, but during the past week the inventor has been exhibiting a model of it at the Johnson House, Warren street, this city, (where he may be found daily this week,) has explained its operations to us, and shown us specimens of its work. The iron bar of which the shoes are made is fed red hot into the machine, and is then cut off the required length, bent by levers, and formed upon dies, swedged and punched at one continuous operation. A working machine in Allegheny, we are informed, makes ten horse shoes, with ease, per minute, and judging from the specimen we saw, these require very little to be done to them afterwards to fit them for use. The shoes are well formed, and exhibit no straining of the fiber of the metal. This machine accomplishes at one continuous operation that which requires three and four different operations, on other horse shoe machines.

[Scientific American.

One drop of oil will stop a hideous noise.

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HORTICULTURE.

SHELTER.

The first business of one about to plant a garden or an orchard in this State, should be to provide his trees and plants with shelter from the winds. The mercury at 20° below 0, indicates a temperature that may well enough render a Horticulturist nervous. He may bear it without flinching, however, if his trees and plants are so sheltered, as not to be *hustled to death* by the piercing blasts which usually accompany such extremes. The mercury *out of sight*, with a still atmosphere is preferable to the mercury at zero, with a keen wind from the north-west.

The difference in the hardiness of plants in a garden completely protected and in one completely exposed to the winds is very considerable; and just this difference, be the same more or less, is probably sufficient to assure success or failure in the cultivation of many of our finest fruits and plants. Our readers cannot have failed to notice the striking difference in the temperature of a road-side sheltered by the persistent foliage of the White Oak thickets and that of the open prarie. "Trees set in motion when the sap in the trunk and branches is frozen solid are almost sure to be injured by the rupture of their tissues, whereas, if they remained at rest no such mischiet would ensue. A climbing rose fastened securely against the north side of a house will resist the cold that would kill to the ground a much hardier variety moved about by the wind. A chilling wind from the north-east, occurring at the time when the blossoms are falling from the fruit trees and the young fruit is "setting," is frequently the cause of the loss of almost the whole crop. The winds of summer, if not so injurious, are vexatious and provoking enough, to one who is at all particular as to the form of his trees. Those who have attempted to grow pyramidal trees in exposed situations, will appreciate one of the advantages of shelter. The slow and stunted growth of many a favorite tree is due to the almost constant pressure of the summer winds. It is most vexatious that some rare tree, which we have procured with difficulty and have set our heart on growing to perfection, in the shortest possible time should, in spite of our efforts in the way of cultivation, grow as reluctantly as though it were bent on defeating our expectations. The tree, doubtless, does its best, but how can it grow rapidly while half its forces are expended in defending itself against the power of the wind?

"But," say some faithless souls who would grow fruits—not for their wives and children and friends, or for the love of bringing them to perfection, but simply *on speculation* and for the *money* they will bring—"have we not trouble enough with the 'blight,' and the 'bark louse,' and the 'borer'? Must we go to the *expense* of building walls and fences and planting screens to defend our trees from *the winds?*" No, gentlemen, *you* need do no such thing. There are crab apples, and choke cherries, and wild plums in abundance; they are perfectly adapted to resist the fiercest wind, and in all respects are perfectly hardy. It is true that the wild plum is not equal in flavor to the Green Gage, nor is the crab apple to be ranked as "best;" nevertheless, they will do well enough for those who, having the means, object to the expense and care required to bring the finest fruits to perfection, and who deem the pains and labor expended for any other purpose than that they may *pocket* the proceeds, as absolutely lost and thrown away.

In the next number we propose to say something about plants and trees suitable for screens. *

For the Farmer.

BELMONT APPLE—GREAT GROWTH.

HORT. ED. WIS. FARMER—DEAR SIR:—In compliance with you request, I proceed to give you a history of the Belmont apple trees you saw at my place last summer—bending to the ground by the weight of their prodigeous crops. The trees, five in number, were planted in the spring of 1848. The soil was a strong loam, with a marl sub-soil. A crop of potatoes had been taken off the ground the previous year. No manure or compost was used at the planting of the trees, but the holes were made large and deep. The trees were alike in all respects, except that two of them were budded at the surface and three of them at 3½ feet from the ground. I do not know how this circumstance can account for the discrepancy of their after career, but in every other particular

"These hands were not more like."

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The three trees budded standard high began to bear in the summer of 1849, and have borne regularly every season since. The two budded at the surface of the ground, though growing near the others and receiving the same care, bore no fruit until 1854. These facts furnish an interesting question to vegetable physiologists. Could the slight dissimilarity in the structure of these trees have been the cause of so marked a difference in their fruitfulness? or must we attribute it to some other and unseen cause? If this slight odds did make the "difference," it is a fact of some importance to nurserymen and fruit growers.

This year the five trees (seven years planted,) ripened thirty bushels of superb fruit. One of the hitherto barren trees supported a load of ten and a half bushels, and appeared with its bright appendages like a mass of gold.

My orchard has been cultivated with hoed crops, and care has been used that no noxious insects have lived to their detriment. Notwithstanding the large crops these trees have ripened, they have, for their age, attained a fine size, being now some fourteen feet high, with proportionate diameters. They have produced, altogether, some fifty bushels of fruit.

Yours, truly, ANDREW CHILD.

The product of the above trees was obtained, without extra manuring, on a soil which had been somewhat exhausted by the successive crops of grain which had been taken off by the former proprietor. The superior growth of Mr. CHILD's trees and the superior quality of his trees, is due simply to the intelligent cultivation he has given them. At Milwaukee, the fruit would have brought, readily, two dollars per bushel. At this rate of price and production, one acre of Belmonts would have brought to the proprietor, in the course of only seven years from planting, some $700. To say nothing of the difference in the cost of cultivation, wheat crops, at 30 bushels to the acre, and selling at $1,50 per bushel, would not have brought half that sum. We hope to present in the next number some account of Mr. CHILD's Vanderver, a notable specimen of which, from his orchard, is now before us. *

FARMERS, make a proper use of your time, and remember that when it is once gone it can never be recalled.

ANSWERS TO CORRESPONDENTS.

J. M. CASEBEER, CEDAR CO. IOWA.—Of a north-eastern or south-western exposure we should prefer the first for peaches and plums, and the latter for grapes. For a good article on grape culture, see the forthcoming "Transactions of the Wisconsin Fruit Grower's Association."

"A LADY HORTICULTURIST."—The best Moss Rose is the old Blush Moss. Of the newer sorts, Lancii is superb. The best Perpetual, or Remontaux, is "Grant des Batailles." In form, color, and in its free-blooming qualities, it is, in our opinion, unequalled. The best Prairie or Running Rose, is "Prairie Queen." The best Summer Rose is "Coupe d' Hebe." Among the striped or variegated roses, we have seen none superior to "Village Maid."

H. B., WAUSHARA.—One of the most profitable fall and early winter apples is the Belmont. As to pears, we are of opinion that *more money* can be made from an orchard of the White Doyenna than from any other variety. The best compost for pear trees is made from muck and ashes. The muck should be reduced by exposure to frost and air, and the ashes should be thoroughly mixed with it, if unleached, in the proportion of about one to nine. If the soil is poor, add old manure from the horse stable.

J. G. C., LANCASTER.—The "worm in the apple" to which you refer, we suppose to be the carpocapsa pomonana, which, in the form of a brownish gray moth, in the months of June and July deposits eggs in the calyx of the fruit. It soon hatches into a reddish white grub, and penetrating to the core, causes the fruit to ripen prematurely, and drop from the tree. The grub now "leaves," and making its way to some crevice in the bark of the trunk or branches, spins a cocoon, from which, emerging in the following spring, it renews its depredations. The remedy is to pick up, as they fall, and feed to the swine the fruit containing the grubs, and when the leaves are off the trees to seek for and destroy the cocoons. If the bark of your trees is kept smooth and bright by frequent washings with strong soap suds, the grubs will find it difficult to make a lodgment. You will find an answer to your questions about the "tree lice" (bark louse,) in the number for March, in which we propose to communi-

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cate what information we have on the subject. Write us more particularly about the plums which "after maturing present the appearance of having been stung—having a line from the surface to the stone of the fruit, causing it to decay rapidly." Are your plums generally affected in this way? if not, what varieties are most subject to this disorder? What is the character of your soil?

SCIONS AND CUTTINGS—Should in this climate, be made in the fall or early winter. If left later, they are liable to injury from intense cold. Those who have neglected this matter should attend to it on the recurrence of mild weather. Grape vines not pruned in the fall, should be pruned before the 20th of February. Those who neglected to give their vines proper protection, will probably have to prune on the "RENEWAL" system.

A NEW BEGINNER, MT. PPEASANT.—"Low flat land" is generally the worst situation on which an orchard can be planted. Fruit blossoms will be liable to injury from late frosts, and the trees by water in excess at the roots. Your high flat land will be well enough provided the sub-soil will permit the water to pass off freely. The "rolling land" is unexceptionable, if the soil be good. The "openings" are preferable to "prairie." Other things being equal, we should prefer a "slope to the east." Thirty to thirty-five feet is a proper distagce at which to plant apple trees. A calcarious loam—*i. e.* a soil composed of about equal parts of sand, clay, and vegetable matter, with an admixture of lime, is the best soil for the apple. We have, however, seen no soil in Wisconsin (not too low or wet) in which the apple would not flourish. Seedlings, budded or grafted above the collar, are the best. If you want an orchard for your own use, pleasure, or profit, do not plant trees made by grafting on pieces of roots. For varieties particularly adapted to this state, see forthcoming "Proceedings of the Wisconsin Fruit grower's Association." We name a few sorts that, with good cultivation, are sure to give satisfaction :—

SUMMER APPLES—American Summer Pearmain, Early Harvest, William's Favorite, Red June.

AUTUMN APPLES—Fall Pippin, Cooper Gravenstien, Spice Sweet

WINTER APPLES—Belmont, Rambo, R. J. Greening, Vandmere, Westfield Seek-no-further, Talman's Sweet, Rawle's Janet, English Russett.

Get "The Fruit Garden," by Carry—every fruit grower should have that book.

J. B. D., PLOVER, PORTAGE CO.—"When is the best time to prune fruit trees?" Pruning young trees with reference to promoting their growth, and the form of their heads, should, in this climate, be performed about the 20th of June, or when the leaves are all expanded and the trees are growing with the greatest rapidity.

THE PEACH CROP.

Last year, having demonstrated the fact that peaches may be produced in Wisconsin, of a quality not inferior to those of a more southern clime, we would naturally suppose that those who are admirers of that most delicious fruit (and where is the person who is not?) would be anxious to know if the extreme cold weather of January 8 & 9 has not destroyed the peach buds. To such we would say, it is our opinion the peach buds have not as yet been injured, and may be secured from what is called "winter-killing," by a little care. Take coarse manure, chaff, or straw, and cover the ground around the trunks of the trees, so as to prevent its thawing until April, and the work is done. Proof is not wanting to establish the fact that peaches are produced where the cold is often intense. In the valley of the Conhocton peach trees are often killed to the ground, while on a neighboring hill, 500 feet above the valley and 1200 above the level of the sea, there is an orchard which yields regular crops. R. P. MAINE.

Oregon, Jan. 24, 1856.

WOMEN SHOULD LEARN TO SWIM.—Lloyd's forthcoming "Steamboat Directory" gives a thrilling instance of the necessity for women knowing how to swim. When the ill-fated Ben Sherrod was in flames on the Mississippi River, and the lady passengers who had thrown themselves into the water were drowning around the boat, the wife of Capt. Castleman jumped into the river, with her infant in her arms, and swam ashore, a distance of half a mile, being the only woman saved out of sixteen. She had learned to swim when a girl.

One bad novel wastes reams of good paper.

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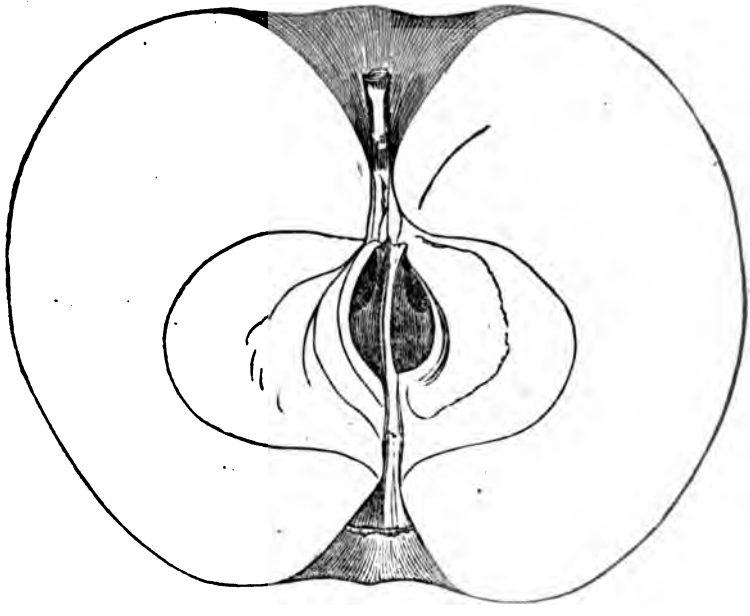

NORTHERN SPY.

Above we give an outline of the Northern Spy, from a specimen exhibited by Mr. ABEL SLOOUM, at the meeting of the Wisconsin Fruit Grower's Association, held at Whitewater, December, 12th and 13th.

We give a description by Barry and the remarks made on the fruit at the meeting of the F. G. A.

Large, striped, quite covered on the sunny side, with dark crimson, and delicately coated with bloom. Flesh, juicy, rich, highly aromatic, retaining its freshness of flavor and appearance till July. The tree is a remarkably rapid, fine erect grower, and a great bearer; like all trees of the same habit, it requires good culture and an occasional thinning out of the branches, to admit the sun and air fully to the fruit. It is one of the largest, most beautiful and excellent long keeping apples yet known. Originated in Ontario Co., N. Y. Mr. Cole says it is found to be very hardy as far north as Maine.

From the notes of the discussion at meeting of the F. G. A.

J. C. BRAYTON.—Quality "best," unproductive while young, tree hardy.

A. G. HANFORD—Trees disposed to bear a few specimens while young, thought it would eventually prove to be very productive, will do well root grafted.

ABEL SLOOUM—It is best to work this variety on strong stocks, has fruited it at 2, 3, and 4 years from grafts inserted in standard trees.

HANFORD—Moved to recommend for general cultivation.

BRAYTON—Moved to amend by adding the words "to those who can afford to wait for the fruit." Amendment lost.

Original motion carried.

A HINT TO THE LADIES.

The following paragraph; which we cut from an exchange, is local in its application:

"Among all the 'accomplishments' which our young ladies are expected to acquire, it is to be regretted that the art of conversation is not included. No grace of person or manners can compensate for a lack of this. In youth the conversation of our women is apt to be trifling and insipid, and in middle age is too often confined to complaints of health and the scandal of the day. Lively conversation, upon instructive and elevating topics, is but little practiced, but whenever it is found, it gives a charm to the society of females which nothing else can. It triumphs over deformities and old age, and makes ugliness itself agreeable. Curran, speaking of Madame de Stael, who was by no means handsome, but a splendid conversationist, said that she 'had the power of talking herself into a beauty.' Ladies should think of this.

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VEGETABLE PHYSIOLOGY—PRACTICAL HINTS.

Messrs. Editors—Much has beed said and [illegible] still be said of the relation of climate, of chemistry, and of geology to agriculture; but there is still another branch of science which both shows the wisdom of practices that have already obtained and provides hints for experiments. I mean *vegetable physiology*. No modern student of botany is satisfied with mere classification of plants, but he enters upon the philosophical part of the study, and inquires into their internal structure, and thus elicits some practical suggestions. Thus, instead of merely arranging plants in a vocabulary, according to some resemblance, or some supposed resemblance, he seeks their hidden parts, and endeavors to learn the whole process of growth, of fructification and of decay. He observes in every plant a process similar to that of the animal economy. The plant, like the creature of higher grade, eats, drinks, breathes, exercises, digests, assimilates, secretes, and excretes. Very curious, and very beautiful, too, are all the processes by which the tree, the maize stalk, the blade of grass lives, grows, thrives—and very important too, may a knowledge of it be to the grower of trees, of maize, and of grass.

At the extremities of the small fibrous roots are the mouths, or as botanists term them, the spongioles, (from the power they have, like sponges, to suck up all moisture that comes in contact with them.) Without these the tree cannot feed. Hence their importance. Hence the importance of preserving them with special care in transplanting. Hence, also, the importance of multiplying them by cutting off the tap-root at such times. The leaves serve as lungs, and all over them are nostrils (stomata,) through which they breathe. The sap passes from the extremities of the roots to the extremities of the branches, becomes elaborated at the leaves, and descends into the wood a new substance. Much of the watery portion evaporates. Therefore, the leaves must bear proper proportion to the roots—evaporation may be too great or too little. Therefore, if the roots are reduced or injured in transplanting, the tops must be proportionately reduced. But the roots need the breathing and evaporating process to some extent, and consequently the tops of the trees should not be entirely cut off, and left mere bean poles.

Not only must the nutricious juices of the earth readily enter the plant through an abundance of fibrous roots, and have plenty of leaves for elaborating them; but there must be ready and proper communication between roots and leaves. Now, Nature provides that the sap shall flow first through the wood, especially the tender part of the wood, namely, that most lately formed—the albumum—and that in its descent, after circulating through the leaves, it shall pass between the bark and the wood, depositing at the same time a new layer of wood, and a new layer of bark. And this process goes on through the whole length of the tree, and even throughout the roots. Such being the case, it is obvious that if it is desirable to force any portion of a tree, it can be done by intercepting the course of the descending sap. This may be done by a ligature, or by ringing—that is, by taking out a complete ring of the bark fairly into the wood. During the first season the portion above the ligature or ring grows very vigorously, spending much sap upon its branches, leaves, and fruit.

This mode of treatment will only answer occasionally, as little fluid will descend thro' the solid wood, and the tree or portion of tree thus operated upon will die the following season. A more useful suggestion from the physiological structure of the tree is a mode of healing trees the bark of which has been gnawed off by horses, or mice, or other animals, or been peeled off by accident. It is found, as might be expected, that a ring of fresh bark fitted into the excoriated portion, or even a twig, or twigs, so inserted as to keep up the communication between the tree's extremities, will save it from death. The writer knew of an apple-tree of 15 or 20 years' growth accidentally injured, as above, which was saved by the insertion of a fresh piece of twig, bark and all, no larger than his little finger, It continued to thrive and bear fruit.

It is obvious from the mode of growth above described, that whenever a branch is cut off, the habit of sending sap to that part of the tree must have become such, that a new channel will be sought for it. We should naturally expect to find latent buds

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putting forth, or the alternative of a plant—bleeding to death. For fear of the latter evil, we will not try the experiment during the spring of the year when the sap flows most freely; but at other times we may trust to the restorative powers of nature to cicatrize the wound. The experiment succeeds—the branches are both multiplied and made to grow vigorously. More concerning this process at some other time, when we will speak more at length of physiological suggestions in respect to pruning. We see reason for another process adopted by tree-growers—namely, that of trimming roots, not only to keep up the balance between roots and leaves, but to occasion the putting forth of young and vigorous rootlets. There is nothing apparent in the roots corresponding with buds in the branch, but fibres are found to put forth most readily just where the root is truncated. In accordance with all I have said is the curious practice which has been followed in some countries for forcing plants of succulant roots, in order that good seed and an abundance of it may be obtained—such plants as the carrot, the radish, and the parsnip. An interesting account of it is given in Lindley's Horticulture. I present it in as few words as possible to conclude the present communication:

The extremity of the root is cut straight off, so as to leave nearly all the edible portion. With a sharp knife it is then slit from the bottom nearly to the crown. It is then a quarter round and slit again, so that it is nearly divided lengthwise into four parts. Afterwards it is dipped into a rich compost and set out in the bed somewhat deeper than usual.

Innumerable roots are thrown out from the cut edges of the plants, the consequence is a rapid and luxuriant growth, and a speedy accomplishment of the object.

H. F. B.

Chinese Barbers.—The barbers in town go about the streets hunting up their customers. They carry with them a stool a towel, and a pot containing fire. When any person calls them, they run to him, and planting their stool in a convenient place in the street shave the head, clean the ears, and dress the eyebrows, brush the shoulders; all for the value of a little more than a half penny. Then they ring their bell again, and start in pursuit of another customer. What would our barbers say to this custom?

HOW TO MAKE A HOT-BED.

To write of this may seem to write of what it is supposed every one knows, but the past week's enquiries have convinced us that every body does not know, or if they knew once, have forgotten how to make a hot-bed, for growing early vegetables. We presume, therefore, to give the following, as simple, plain directions for forming a small forcing frame for the purpose above named:—Select a dry place, i. e., where the water drains off readily after, or during rain—dig out one foot deep of soil from a space five by seven feet, have ready some fresh, horse stable manure, which has been kept from the rains and turned over twice during say ten days—take this manure and with a fork shake it carefully and evenly into the five by seven space, being cautious not to tread, or in any way to press upon it more than merely a light tap with the fork, very evenly over the whole, while putting in say a depth of two feet of it, then have a box made of inch boards, four by six feet, fourteen inches high on one side, and ten on the other; or in other words have that which is to be the back of the same four inches higher than the front. Set this box upon the bed of the manure, leaving six inches all around uncovered. Now carefully shake into the bed four inches deep more of the manure, and outside, bank up the manure to a level with the edge of the box, and about an average of say one foot wide. Now place your sash of glass four by six, upon the bed frame, and leave it twelve hours, then give a little air; close again. After about forty to forty-eight hours, you may venture to put on the soil, which should be of a light, loamy nature, entirely free from stones, &c. This should stand about twenty-four hours, when you may give air, and if clear and sunshiny, it is perhaps best to sprinkle lightly with water, and after, say ten or twelve hours more, you may venture to sow seeds.

If seeds are sown at once, when the earth is first put on, the soil is sometimes said to burn from the heat and the germ of the seed is thus destroyed.

After about ten days it is generally found necessary to renew the outside banking with fresh manure. The object of having the manure turned over before using, is to assist fermentation, in destroying the rank and noxious vapors injurious to the plant—gardeners call it *sweetening* the manure.

All light should be shaded a few days after being sown, and it is always best to avoid too strong sun upon the frames while the plants are quite young.

A man may have a thousand acquaintances and not a friend among them. If you have one true friend, then you may think yourself happy.

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EDUCATIONAL.

For the Farmer.

EXCLUSIVE EDUCATION.

MESSRS. EDITORS—Your avowed intention of devoting a portion of your sterling periodical to educational matters I hail with pleasure. You will certainly not find the people of the west slack in appreciating the merits of the undertaking. To the farming portion of community the means and methods of procuring a thorough education, and discussions upon the gross and detail of *practical* and comparatively *useless knowledge*, cannot fail to be of more interest than mere political fume, or some other of the feudal topics of the day; and while this is borne in mind, there is room for wide hope that you will be followed with plaudits.

The sons and daughters of our farmers do not always rest satisfied with the opportunities afforded by the common school, (though the common school of the present has all the ability possessed by the "high school" of the past,) but are looking up more and more to the facilities afforded by our many institutions for the attainment of higher knowledge. There is no stand-point now between the "four simple rules" and the "rule of three" for them in mathematics; and in all the sciences, polite and profound, there are found attractions strong enough to give charm to that which once seemed a drudgery. The school-room has divested itself of many of its rigors, and much of that sameness so repugnant to the youthful mind. Old forms are disappearing, and the "old routine" has become an ever varying, ever pleasing pastime among experiments and inventions. Reason has taken the place of brute force in the government of students, and the consequence is apparent —inclination leads where necessity would have driven. Emulation has taken the place of stubborn will, and the dolt is made by it a proficient in literature or in science, simply by applying moral stimulent to his ambition. These improvements in educational matters are proudly apparent, and others are daily supplanting some feature more or less illogical or umbrageous. Text books are becoming codes from which to *reason*, and not mere abstract rules established by the *ipse dixit* of an author so profound as not to imagine an explanation necessary. Plans are adopted to set the child to thinking for himself, and developing the faculties of his own mind, as soon as his school days have begun, and in a system of this kind, fully perfected, lies the whole vantage-ground we have gained from the past. The in-born *why*, so prominent a feature in the organization of intelligent childhood, is no longer hushed or stifled, but encouraged and strengthened.

Step by step old prejudices are dispelled, and that which gives elevation and refinement to society acknowledged and preferred. Old truths are constantly presenting themselves in a new light, and principles as old as the creation gather from new relation new impetus. I can see and approve of *these* things, Messrs. EDITORS; but it is in relation to what I consider would be a positive improvement still further in our progression that I have commenced this communication. The male and female minds —the two grand component elements of society—I would see equally dealt with, in as far as educational advantages are concerned. I would not only see them equally dealt with, but also associated and trained *together*—subjected to the same influences, taught in the same schools, by the same instructors, while they vie with each other in the extent of their attainments. There is something more than *theory* involved in this, for the principle relates to practical life; yet it seems to have been over-looked, in a manner, by that praise-worthy embodiment of enterprise which gave Madison its State University. That noble institution is worthy of patronage and confidence; but how much greater would have been its capacity had it been a school in which *the sexes were taught together*.

We have our colleges, and our boarding-schools, springing up in every portion of the country, for the *exclusive* education of males or of females; but what is their productive faculty, or their sterling worth, in comparison with what they might produce or possess, if established upon more liberal and rational principles. The boarding-schools, which particularly I protest against, are nurtured, however, by parents; and with them only rests the power to overcome their faulty effects.

It always did seem to me that the method usually adopted by liberal parents for the education of their daughters was of the most illiberal nature, and such, frequently, as serves only to unfit them for the duties

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and associations of after life. In all candor, I believe that it would be better for society and the world, if the education of woman were such as to prepare her for that association which by nature must necessarily be her lot; but I could willingly forego this proclivity of mine for the necessity of *an education of some kind.* Mental training, on any enlightened plan, will seldom prove injurious, at least to the mind, and yet with exclusive institutions of learning I have some little fault to find—for I must consider that within their pale some important qualities of mind are neglected and left undeveloped. There are many parents prejudiced against institutions of learning in which both male and female are taught, and which thus represent the society of the world they are fitting for—as if the associations of youth were unfit to be woven into the firm compact of social familiarity. This prejudice is certainly erroneous, and cannot be handled too severely. The actual virtue of colleges and boarding-schools is far beneath the merits of those schools in which boys and girls— young men and women—are taught together, their relation to each other, the parts they are to play in the drama of existence, and their true moral and intellectual companionship as human beings.

Too much cannot be said against the evils of college life, where man shuts himself up from the refining companionship of woman, and from the practical knowledge of every-day life, to fit himself only for a life of theory; for in such case his education is of no practical utility—it comes not from the passingalities of every day—and all the polish that can be extracted from books, without the influence of the female mind, and the society of woman, will only serve to show a want of polish, when the world calls the student from his books to fill a place in the ranks of practical and useful men. The success of college graduates is a monumental warning of this tone.

And so, on the other hand, with the boarding-school education of woman. The female mind is more susceptible and yet more tenacious of bias than the mind of man; and, debarred the society of the sterner sex, young women but too often form habits of thought and deportment inconsistent with the true order of nature, and the true relationship of woman to man and to society. And these facts are, in many cases, not only unprovided for, and not guarded against, but it has become a part of boarding-school education to instruct young ladies in all those nice technicalities of etiquette, which make a farce of social bearing, while the rules of fashionable affectation which are learned in these exclusive institutions too frequently turn modesty into a "refined maudlin," and true purity of mind into nocent lunacy. Every day gives evidence of these facts; but there are yet a few schools for the education of the female mind that may be relied on, as inculcating sound morality and healthy decorum. We must look to the future.

You may rely upon it, Messrs. Editors, that these principles will sooner or later be recognized throughout the land; and *then*, our young men and young women will compete with each other in the ample fields of science, while they learn, also, profitable and useful lessons in human nature.

A. J. M.

STUDY OF THE ANCIENT LANGUAGES.

Some one has made the remark in favor of the classics, that they are easily comprehended by the young, and at the same time accustom them to dilligence and patience —qualities essential to every man, whatever be his vocation in future life. Without going into a discussion as to the truth of these statements, (which in many cases I am very much inclined to doubt,) I would merely ask whether there are no modern languages much more easily comprehended, or whether there are no mathematical studies far better calculated to call into play the faculties of the young mind, and to infuse into it all the excellent qualities which it is supposed to acquire from the study of the Greek and Latin. It should be borne in mind that the mere study of language is nothing but that of abstractions,—of declining and deriving,—and to surmount the obstacles of a language for the little amount of knowledge derived by the generality of students from its literature, may be compared to the effort of that student who endeavored to state the propositions of Geometry in metaphorical language. Classical teachers may uphold the ancient languages to any disproportionate extent they please; but when they would have all, without discrimination, make it one of their chief studies, we cannot but exclaim:—How absurd it is for the generality of students to spend one-third of their educational course

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in acquiring the dead languages, of which they know in the end but *little*, to the neglect of modern languages, of which they learn *nothing*.

With regard to the refinement of taste, and the culture of the imagination, which the classics are supposed to produce, I confess that no one, without an acquaintance with such authors as would offer him these advantages, could be reckoned a polished and well educated man. But these refinements can be better obtained by the study of the English Classics. Who can estimate the treasures we possess in the mine of English poetry? Where in the whole range of Grecian and Roman literature, can you show me a POPE, a THOMPSON, a COLERIDGE, a BYRON?—poets who have opened the school of nature, and taught us the languages of the seasons, of the flowers, the brooks, the winds, and of almost every appearance in nature. Shall we then be required to explore the depths of ancient founts, that we may taste of them, when we can easily drink of the richer and more abundant fountains of modern literature? MILTON equals HOMER in sublimity, and surpasses him in the choice of subject, added to which is the consideration that, in the moral of their works, the Paradise Lost far excels the Iliad. SHAKSPEARE alone is equal to all the Greek and Latin dramatists combined; for his works contain all the predominant excellencies which are to be found singly in theirs. English poetry presents every quality and excellence of which that art is susceptible be it sweetness or power of versification, depth or variety of feeling, beauty of imagery, or range of daring imagination.

I may, perhaps, seem guilty of irreverence toward those great authors to whom we owe the wonderful productions of genius and of art, when I declare that the ancient classics take up the place of more useful studies. We call to mind the multitude of benefits which the classics once conferred on the human race. We are led to an implicit veneration of the classical writers by a sort of delusive splendor, in seeing a vast number of learned scholars within and without colleges cherishing and defending the cultivation of Latin and Greek. But while we feel sentiments of gratitude and obligation to those works upon which our men, have reared their palaces of genius and art, we should remember that though the positive value of the productions of Greek and Roman genius remains the same, their relative value when compared with the vastness of our treasures, is constantly falling.—The "stock" bequeathed to us by the ancients has been so carefully improved, that the accumulated "interest" has already more than doubled the "principal." When, therefore, in the pursuit of knowledge, we entertain grateful feelings for the ancients, it should be nothing but feeling, and should not interfere with our action. "Nothing," says SYDNEY SMITH, (and with his words I will close this essay,) "nothing will do in the pursuit of knowledge but the blackest ingratitude; the moment we have got up the ladder, we must kick it down; as soon as we have passed over the bridge, we must let it rot;—when we have got upon the shoulders of the ancients, we must look over their heads. The man who forgets the friend of his childhood in real life, is base; but he who clings to the props of his childhood in literature, must be content to remain as ignorant as he was when a child. His business is to forget, disown, and deny to think himself above every thing which has been of use to him in time past—and to cultivate that exclusively from which he expects future advantage; in short, to do everything for the advancement of his knowledge which it would be infamous to do for the advancement of his fortune.—If mankind still derive advantages from classical literature proportionate to the labor they bestow upon it, let their labor and their study proceed; but the moment we cease to read Latin and Greek for the solid utility we derive from them it would be a very romantic application of human talents to do so from any feeling of gratitude, and recollection of past service." S. T.

University of Rochester, 1855.

THE MESILLA VALLEY.—A letter from Washington says—"The reports from the Mesilla valley are exceedingly interesting, and the private notes of the U. S. officials are worth their public reports twice over. The whole country is a vast ore field, silver, copper, iron, platina, gypsum, and coal, in vast beds, abound in every direction, and are in the richest quantities in the region along the Pecos, and up to the 33d parallel, which had been thought the poorest section of the Rio Bravo valley.

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MECHANICAL.

OPPOSITION TO INVENTIONS & DISCOVERIES.

We live in better times than our forefathers; times of more enlightenment, and public candor in examining into the claims of discoveries and inventions, and in rewarding their authors that honor and remuneration which they so justly deserve. It is sorrowful to reflect upon the sufferings which ancient inventors endured, for those heaven-born gifts, which now command so much admiration. Roger Bacon was forbidden to lecture; and when sixty-four years of age, was imprisoned in his cell for ten years, for the offence of making concave and convex glasses, the camera obscura, and burning glasses. Galileo was also imprisoned for his discoveries in astronomy, and good evidence of his being put to the torture secretly, for publishing his opinions, is not wanting.—Guttemberg and Faust, the inventors of printing, were looked upon as having sold themselves to Satan, and were regarded with suspicion. We might present a long list of martyrs to science, discovery, and invention, but time and space would fail us. We rejoice that the days of such persecutions and trials are gone past forever. Still there may be many persons living in our day, who are imbued with prejudices against new projects and new discoveries, and may be given to the habit of sneering at new improvements in machinery, especially if made by inventors not engaged in the line of business which the machinery is designed to improve and advance. It is our opinion that such prejudices are not uncommon in factory and workshop, but they are wrong—very wrong. A machinist is liable to sneer at an invention made by a weaver if it relates to a tool; and a weaver to sneer at that of an engineer if it relates to a loom. These trade prejudices are perfectly natural, for the machinist may well consider that a weaver cannot be very conversant with lathes and drills; and the weaver may well exclaim, "what does an engineer know about a loom?" This is natural, we say, but not always correct. The man who is accustomed to work at one branch of business, becomes habituated to its very defects, and, in a measure, insensible or blind to them. On the other hand, a stranger to that business, if of an ingenious turn of mind, is more ready to notice such defects, and to plan and labor to make improvements. This is perhaps not a general rule, but it has happened in very many instances. Arkwright was a barber, yet he invented a most valuable improvement in cotton spinning machinery. Whitney was not a maker of cotton machines when he invented the saw-gin. Cartwright, the inventor of the power loom, was an Episcopalian clergyman. Forsyth, the inventor of the percussion lock for fire-arms, was a Presbyterian minister; and the Rev. E. Burt, of Manchester, Conn., was the inventor of the first American check loom. We could present a long list of inventors who have made valuable improvements on machines entirely out of their own line of business. In view of these facts, let us say to every man, banish every thought of prejudice against any new invention that may be brought under your consideration, no matter who its author may be. Examine the invention; do so carefully, and then candidly judge of its merits and demerits—judge it on its own account alone, for many good improvements have been prevented, for years, from finding their way into general use, simply because of prejudice in examining into their merits.

[Scientific American.

AMERICAN GUN MACHINERY FOR THE ENGLISH GOVERNMENT.

The English government having determined upon a grand National Armory near London, and finding that the machinery for the manufacture of guns was superior in this country to that in England, have had built here a complete set of machinery in use at our armory. The Springfield Republican says:

"Robbins & Lawrence, of Windsor, Vt., were employed to build some 100 'milling machines,' used to cut the gun locks, and execute the other iron parts of the gun. These are a common machine, in this country at least, and were some months since completed and sent abroad. This branch of the contract amounted to some thirty or forty thousand dollars.

"But the more important and intricate machinery—that for the manufacture of the gun stock—was entrusted to the Ames Manufacturing Company of Chicopee. This has been just completed, and was dispatched to England in the steamer of this week. Its cost was $50,000."

Several American mechanics have left for England, to take prominent positions in the English Armory; where it is intended to turn out five hundred muskets per day. Messrs. Robbins & Lawrence, at Windsor, Vt., and at Hartford, Ct., are completing twenty-five thousand rifles, for which they have a contract with the same government.

[Exchange.

Young America will yet pay back to the "Old Country" all we have borrowed of her.

[Ed. Farmer.

Byron says of Jack Bunting "he knew not what to do and so he swore."

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MISCELLANEOUS.

THE BOY WHO CONQUERED!

Some few years ago, a lad who was left without father or mother, of good natural abilities, went to New York, alone and friendless, to get a situation in a store as errand boy, or otherwise, till he could command a higher position; but this boy had got in bad company, and had got in the habit of calling for his "bitters" occasionally, because he thought it looked manly. He smoked cheap cigars also.

He had a pretty good education, and on looking over the papers, he noticed that a merchant in Pearl street wanted a lad of his age, and he called there, and made his business known.

"Walk into the office my lad," said the merchant, "I'll attend to you soon."

When he had waited on his customer, he took a seat near the lad, and he espied a cigar in his hat. This was enough. "My boy," said he, "I want a smart, honest, faithful lad; but I see that you smoke cigars, and in my experience of many years I have ever found cigar smoking lads to be connected with various other evil habits, and if I am not mistaken, your breath is an evidence that you are not an exception. You can leave; you will not suit me."

John—for this was his name—held down his head and left the store; and as he walked along the street, a stranger and friendless, the counsel of his poor mother came forcibly to his mind, who upon her death-bed, called him to her side, and placing her emaciated hand upon his head, said, "Johnny, my dear boy, I'm going to leave you. You well know what disgrace and misery your father brought on us before his death, and I want you to promise me before I die that you will never taste one drop of the accursed poison that killed your father. Promise me this, and be a good boy, Jonny, and I shall die in peace."

The scalding tears trickled down Johny's cheeks, and he promised ever to remember the dying words of his mother, and never to drink any spirituous liquors; but he soon forgot his promise, and when he received the rebuke from the merchant, he remembered what his mother said, and what he had promised her, and he cried aloud, and people gazed at him as he passed along, and boys railed at him. He went to his lodgings, and throwing himself upon the bed, gave vent to his feelings in sobs that were heard all over the house.

But John had moral courage. He had energy and determination, and ere an hour had passed he made up his mind never to taste another drop of liquor, or smoke another cigar as long as he lived. He went straight back to the merchant. Said he, "Sir, you very properly sent me away this morning for habits that I have been guilty of; but, sir, I have neither father nor mother, and though I have occasionally done what I ought not to do, and have not followed the good advice of my poor mother on her death-bed, nor done as I promised her I would do, yet I have *now* made a solemn vow never to drink another drop of liquor, nor smoke another cigar; and if you, sir, will only try me, it is all I ask."

The merchant was struck with the decision and energy of the boy, and at once employed him. At the expiration of five years this lad was a partner in the business, and is now worth ten thousand dollars. He has faithfully kept his pledge, to which he owes his elevation.

Boys, think of this circumstance, as you enter upon the duties of life, and remember upon what points of character your destiny for good or evil depends.

[Northern Farmer.

SALT MANUFACTURE AT SYRACUSE, N. Y.

The amount of salt manufactured at the great salt works of Syracuse, Onondaga Co., is somewhat over one million of barrels annually. It is thought the amount for this year will exceed that of former years by nearly one half million bushels. About seven months in the year is all that can be devoted to the manufacture. If a person owns a 'block' or "vats," as the works are called, he may receive a sufficient amount of salt water for one bushel of salt, for one cent, which also includes the cost of inspection. To prevent an undue competition, low prices, etc., certain rules have been established and must be observed by all engaged in the manufacture. 1st, No manufacturer is allowed to make more than 20,000 bushels per annum, and the *lowest price* at which good salt can be sold is $1 25 per barrel of five bushels, and salt is now selling at $1 37 1-2 to $1 40 per barrel. A special committee are selected by the manufacturers to effect sales, which is generally made with a good profit for those concerned. The whole business is conducted upon a regular system, which has been strictly adhered to for a long time past. All other parts of the United States taken together do not furnish so much pure, wholesome salt as the springs in question. The wells in many cases are sunk through bodies of fresh water. Most of the springs however are upon the lake shore. No better salt is made in any part of the world, and although the supply is so great, the demand is still almost unremitted.

Make not your opinions the criterions of right and wrong.

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A LAKE OF PITCH.

A late number of Silliman's Journal contains an account of that remarkable curiosity, "the pitch lake of Trinidad," W. I. It is situated on the western shore of the Island, near the village of La Braye, which is built on a foundation of hard pitch. The lake stands about 90 feet on a plateau above this village, is circular, and half a mile in diameter, surrounded on all sides with a dense forest. Its face is intersected with a network of water channels, which gives it the appearance of marbled paper. The surface of the pitch is pretty hard, and when the water channels are dry it can be passed over on foot. In the centre of the lake the pitch appears to be constantly and silently rising up *en masse*, and what is very singular, numerous pieces of wood are constantly coming up to the surface from below. These are from one to several feet in length, and are forced by the peculiar pressure to assume an upright position, so as to appear all over the lake like stumps of trees protruding through. It is believed that this pitch lake is boiling slowly below. Streams of sulphuretted hydrogen gas frequently issue from beneath, the temperature of which is 97 deg. Fah. The centre of the lake is somewhat plastic, but around the sides the pitch is very hard. The water in the streams and small pools is pure and soft; fish are numerous in them, and aligators make them their habitation. Large springs of petroleum are in its vicinity, and about a mile northward there is a bed of brown coal cropping out upon the sea shore; it is about 20 feet thick, and appears from its dip as if it passed under the lake. The pitch is of great depth, for it has been dug into 18 feet in many places. It is believed to be a submerged bed of vegetable matter, undergoing slow distillation by volcanic action underneath. This store of bitumen appears to be inexhaustible. It is used with wood for fuel by the American steamers plying on the Orinoco river. Mixed with pebbles and sand it makes excellent pavements, and ground floors of houses. With ten per cent. of rosin oil, it makes good pitch for ships. The Earl of Dundonald has purchased a tract of 26 acres of it, and has instituted experiments to discover, if possible, some means of making it a sudstitute for india rubber and gutta percha water-proof or vulcanized fabrics; and he has already made some vulcanized cloth, which, from appearance, bids fair of future success. If such a result crown his efforts—and every person must wish him success—such an inexhaustible supply of cheap material as this lake furnishes will soon bring down the price of such goods in our country, and thus confer unspeakable benefits upon our people.

Worth makes the man—pride, the fellow.

BIRDS AND INSECTS.

Wilson Flagg, in a late number of Hovey's Magazine, makes five classes of insects, and as many of Birds, acting as natural checks upon the increase of insects.

The swallows are the natural enemies of the swarming insects, living almost entirely upon them, taking their food upon the wing. The common martin devours great quantities of wasps, beetles and goldsmiths. A single bird will devour five thousand butterflies in a week. The moral of this is, that the husbandman should cultivate the society of swallows and martins about his land and outbuildings.

The sparrows and wrens feed upon the crawling insects that lurk within the buds, foliage and flowers of plants. The wrens are pugnacious, and a little box in a cherry tree will soon be appropriated by them, and they will drive away other birds that feed upon the fruit, a hint that cherry growers should remember this spring and act upon.

The thrushes, blue-birds, jays and crows, prey upon butterflies, grass-hoppers, crickets, locusts, and the larger beetles. A single family of jays will consume 20,000 of these in a season of three months.

The woodpeckers are armed with a stout long bill, to penetrate the wood of trees, where the borers deposit their larvæ. They live almost entirely upon these worms.

HUSKS FOR BEDS.

No one who has not tried them knows the value of husk beds. Certainly mattresses would not be used if husk beds were tried. They are not only more pliable than mattresses, but are more durable. The first cost is but trifling. To have husks nice they may be split after the manner of splitting straw for braiding. The finer they are split the softer will be the bed, although they will not be likely to last as long as when they are put in whole. Three barrels full, well stowed in, will fill a good-sized tick, that is, after they have been split. The bed will always be light, the husks do not become matted down like feathers, and they are certainly more healthy to sleep on. Feather beds ought to be done away with, especially in warm weather. For spring, summer, and fall, husk beds ought to be "all the go," and such undoubtedly will be the case when they are once brought into use. There is no better time to procure husks than when corn is being harvested, and the husks will be much nicer and cleaner when corn is cut up at the bottom and put in stacks. They do not become so dry and weather-beaten. It is calculated that a good husk bed will last from twenty-five to thirty years.

[N. E. Farmer.

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A YOUNG MAN'S CHARACTER.

No young man who has a just sense of his own value, will sport with his own character. A watchful regard to his character in early youth, will be of inconceivable value to him in all the remaining years of his life. When tempted to deviate from strict propriety of deportment, he should ask himself, "Can I afford this? Can I endure hereafter to look back upon this?"

It is of amazing worth to a young man to have a pure mind; for this is the foundation of a pure character. The mind, in order to be kept pure, must be employed in topics of thought which are themselves lovely, chastened, and elevating. Thus the mind has in its own power the selection of its themes of meditation. If youth only knew how durable and how dismal is the injury produced by the indulgence of degraded thoughts; if they only realized how frightful were the moral depravities which a cherished habit of loose imagination produces on the soul—they would shun them as the bite of a serpent. The power of books to excite the imagination is a fearful element of moral death when employed in the service of vice.

The cultivation of an amiable, elevated, and glowing heart, alive to all the beauties of nature and all the sublimities of truth, invigorates the intellect, gives to the will independence of baser passions, and to the affections that power of adhesion, to whatever is pure and good, and grand, which is adapted to lead out the whole nature of man into those scenes of action and impression by which its energies may be most oppropriately employed, and by which its high destination may be most effectually reached.

The opportunities for exciting these faculties in benevolent and self-denying efforts for the welfare of our fellow men, are so many and great that it really is worth while to live. The heart which is truly evangelically benevolent, may luxuriate in an age like this. The promises of God are inexpressibly rich, the main tendancies of things so manifestly in accordance with them, the extent of moral influence is so great, and the effects of its employment so visible, that whoever aspires after benevolent action and reaches forth for things that remain for us, to the true dignity of his nature, can find free scope for his intellect, and all-inspiring themes for the heart.

GREELEY ON WOMAN'S RIGHTS.

Here is Horace Greeley's opinion of the Woman's Rights doctrine:

A vine was growing beside a thrifty oak, and had reached that height at which it required support.

"Oak," said the vine, "bend your trunk so that you may be a support to me."

"My support," said the oak, "is naturally yours, and you may depend upon all my strength to bear you up, but I am too large and too solid to bend. Put your arms around me, my pretty vine, if you have any ambition to climb as high as the clouds. While I thus hold you up you will ornament my rough bark with your pretty green leaves and shining scarlet berries. They will be as a frontlet to my head, and I shall stand in the forest like a glorious warrior with all his plumes. We were made by the Master of Life to grow together, that by our union the weak may be made strong, and the strong render aid to the weak."

"But I wish to grow independently," said the vine; "why cannot you twine around me, and let me grow up straight and not be a mere dependent upon you?"

"Nature," answered the oak, "did not design it. It is impossible that you shonld grow to any great height alone, and if you try it. the wind and rain, if not your own weight, would bring you to the ground. Neither is it proper for you to run your arms hither and thither among the trees. The trees will begin to say it is not my vine—it is a stranger, get thee gone; I will not cherish thee. By this time you will be so entangled among the different branches that you cannot get back to the oak; and nobody will then admire and pity you."

"Ah, me!" said the vine, "let me escape from such a destiny;" and with this she twined her arms around the oak, and they both grew and flourished happily together.

HOW TO RUIN A NEIGHBOR'S BUSINESS.

Some time since, so runs the current narrative. the owner of a thriving mutton-pie concern, which after much difficulty he had succeeded in establishing with borrowed capital, died before he had well extricated himself from the responsibilities of debt. The widow carried on the business after his decease, and throve so well that a speculating baker, on the opposite side of the way, made her the offer of his hand. The lady refused, and the enraged suitor, determined on revenge, immediately converted his baking into an opposition pie shop; and acting on the principle, universal among London bakers, of doing business for the first month or two at a loss, made his pies twice as big as he could honestly afford to make them. The consequence was that the widow lost her custom, and was hastening fast to ruin, when a friend of her late husband, who was also a small creditor, paid her a visit. She detailed her grievance to him, and lamented her lost trade and fearful prospects. "Ho! ho!" said her friend, "that ere's the move, is it? never you mind, my dear. If I don't git your trade agin, there ain't no snakes, mark

me—that's all." So saying he took his leave. About eight o'clock the same evening, when the baker's new pie-shop was crammed to overflowing, and the principal was below superintending the production of a new batch, in walks the widow's friend in the costume of a kennel-raker, and elbowing his way to the counter, dabs down upon it a brace of huge dead cats, vociferating at the same time to the astonished damsel in attendance, "Tell your master, my dear, as how them two makes six-and-thirty this week, and say I'll bring the t'other four tomorror afternoon!" With that he swaggered out and went his way.

So powerful was the prejudice against cat-mutton among the population of that neighborhood. that the shop was clear in an instant, and the floor was covered with every variety of segments of a circle. It is averred that the ingenious expedient of the widow's friend, founded as it was upon a profound knowledge of human prejudices, had the desired effect of restoring the "balance of trade." The widow recovered her commerce; the resentful baker was done as brown as if he had been shut up in his own oven: and the friend who brought about this measure of justice received the hand of the lady as a reward for his interference.

[Curiosities of Life in London.

PLANT A TREE!

There is no way a man can so effectually rear a monument to posterity, and one for which he shall receive their blessing, as by planting a tree; no matter whether a shade tree that shall protect from the scorching heat of the midsummer's sun, or one that shall yield a luxury in its wealth of delicious golden fruit. From the window by which I am sitting, I see a row of maples planted by my father twenty years since, that suggested this word to you, kind reader; and that row of maples, that cost but a few hours labor then, is now the admiration of all who see it, and an ornament to that old homestead, that is valued above price.

Have you never in riding over the country, passed a house entirely destitute of trees and shrubbery? and has not its dreary' forsaken, uninviting appearance, painfully impressed itself upon your remembrance? And then again have you not passed another in drrect contrast wtth it? here and there scattered around it a flowering shrub, or a climbing vine; if a rustic cot, a honeysuckly or grape protecting its porch, and yielding sweet incense or delicious fruit; just back of it a venerable orchard, fit retreat for the gambols of joyous, merry, laughing childhood, while to complete the picture there were scattered around, a few noble trees that one could love and venerate with a reverence akin to that we feel for those who nurtured our childhood, and guided our youth. Has it not been your fortune to see and compare the two, and has it never occurred to you what gave to the one its charming, attractive, homelike appearance,—and the want of which in the other, rendered it thus repulsive and uninviting? If not, look at the picture again, study it more closely, and you will see that the tree, the shrub, and the vine, tastefully arranged and cared for, have far more to do with the beauty of home, than all else that science and architicture, aided by wealth, can bring. The cottage thus adorned, however humble, is far more attractive and beautiful, than the most stately mansion in its coldness and grandeur, where these are wanting. [The Country Gentleman.

EFFECT OF LIGHT UPON PLANTS.

A plant will only grow under the influence of light. The plant is placed in the soil in darkness, when a chemical change takes place. If a plant is deprived of light, it no longer forms wood. The quantity of light regulates the growth of the plant. Each year's growth of a tree is indicated by a series of fibrous rings, from which we can determine for every year the quantity of sunshine to which the tree has been exposed; also, which has been the sunny side. For the production of every cubic inch of wood a certain degree of the chemical influence of the sunlight and calorific power, is essential. Timber is produced by the tree absorbing through the bark and leaves the carbonic acid (carbon and oxygen) from the atmosphere. Under the influence of light, the plant by its own vital forces decomposes the carbonic acid. In virtue of the vital force excited by solar influence the carbonic acid is decomposed, and the oxygen is set free for the use of the animal kingdom generally, and carbon goes to construct the woody structure of the plant. If we ignite wood it gives out light and heat, from which we can produce a certain amount of chemical effect, the same elements as from sunshine. The quantity of light and chemical forces arising from combustion, represent exactly that quantity which is necessary to occasion the plant to grow. The coal fields are formed by the chemical decomposition of fern-like flora of a peculiar kind. Vegetable life rapidly decomposed under the conditions of a tropical swamp—our coal is the produce of tropical forests. We employ coal in our domestic operations; we subject it to distillation, obtain from it a fluid which circulates through our streets and dwellings. We ignite it, and obtain that light which was once derived from sunlight and solar heat, which in countless rays has fallen upon these lands ere yet man had set his foot upon them, in ages long past and gone. [Scientific American.

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CLIMATE.

An erroneous idea generally prevails respecting climate as affecting personal comfort The dwellers in the sunny South pity the New Englanders, because doomed to shiver in so cold a climate. They, in turn, bless their stars that they are not wading in the snows of Newfoundland.

I have been led, by observation and experience, to doubt whether the people of any one country have much, if any advantage, in the matter of climate, over others.

Our ideas of pleasure and pain are intimately connected with, if not based upon the principle of contrast. In our idea of temperature, we have less regard to the actual than to the comparative degree of warmth.

In the report of one of the exploring expeditions in the Northern Seas, it is said that on a certain occasion the crew were greatly elated with signs of a thaw, the mercury having risen to 40 deg. below zero. Having been subject to a much intenser degree of cold, they felt, as did the boy, whose father had administered to him a severe flagellation, "greatly refreshed."

It may well be doubted whether the people of Maine suffer more from cold than do they of Virginia.

Touching the weather, it is as much as it is with the tariff—all that the people want is to have the line of governmental policy settled—to know what can be depended upon. So of the weather. The down-easter knowing that from the middle of November to the middle of April the ground is to be covered with snow, and uninterrupted cold weather is to prevail, he wraps his fur coat about him, inflates his lungs, braces up his nerves, and thinks no more of the cold than the "rugged Russian bear."

The dweller in the Old Dominion, on the other hand, regarding warm weather as the rule, and cold as the exception, makes no provision for the latter. But when the northern blasts come as they will, he wraps his fig-leaf coat about him, and seeks shelter within the enclosure of his airy mansion, so constructed as to exclude heat rather than cold.

Then there is another consideration which greatly favors the dwellers in cold latitudes. While the earth is covered with snow, there is but little evaporation. The atmosphere is consequently dry, and storms are unfrequent. When there is no snow it is far otherwise. The whole surface being covered with water, evaporation is rapid, and the atmosphere is surcharged with vapor, and the peculiar chillings which characterize a March wind in New England, prevail during the winter months.

Agriculturally, the snowy region has many advantages. It is better for the *soil* to be covered during the winter months. That there is any *virtue* in the remark, "snow is the poor man's manure," I don't believe.—But certain it is, that grasses and grains, are benefitted by being thus protected.

Snow is an imperfect conductor of caloric consequently the surface being protected from the cold of mid-winter, the heat from within dissolves the frost, and when the snow disappears in spring, the frost is gone from the soil. It is not uncommon to find the grass growing before the snow is off.—Fields are ready for plowing soon after they are bare; so that stock will live and seed may be gotten into the ground nearly as soon in Vermont as in Connecticut. Then for doing business, the snowy regions have greatly the advantage. Lumbering is with great difficulty carried on where there is no snow. The lumber lands in Maryland and Virginia would be worth twice as much as they now are with northern winters for the removal of the lumber.

But I will say no more lest I get up an emigration fever towards Greenland.

CURE FOR WARTS ON ANIMALS.

Messrs. Editors—In answer to the inquiry of T. N. Smith of Quebec, for a cure for warts on horses. Corrosive sublimate and red precipitate, powdered and mixed, equal parts, will cure the worst wart in the world on horses or cattle. If the wart is large and loose, tie a fine strong cord around it close to the skin. In a short time the wart will come off. Then apply the powder until the wart is eaten down below the skin; then wash off, and rub on a little sweet oil, and it will soon heal over. If the wart is dry, scratch with a pin or point of a knife until it bleeds; then rub on the powder. It will make a dry scab; pick off the scab and put on the powder again, until it is all eaten off. I have used this in hundreds of cases, and it never failed of a cure. Asa Bartholomew, Jr.

Bristol, Ct.

Messrs. Editors—I see that a great many inquiries are made in the Cultivator, in regard to a method of cure of warts on animals. For their benefit, I will state what has proved in my hands an effectual and an easy remedy, both for man and beast.

R. Muriated Tincture of Iron one part,
Muriatic Acid two parts.

Mix them together, and apply by means of a camel's hair pencil directly to the warts. This to be done twice daily. The warts will soon crumble away leaving the parts sound and smooth; sometimes it may be necessary to cut large warts on the feet of horses before its application.

This has invariably proved successful in my hands. Josiah B. Gale, *Salisb'ry, Mass.*

[Albany Cultivator.

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A HOME PICTURE.

BY MRS. ANN E. PORTER.

An old man sat by the chimney side,
His face was wrinkled and wan;
And he leaned both hands on his stout oak cane,
As if all his work were done.

His coat was of good old-fashioned gray,
With pockets both deep and wide,
Where his "specs," and steel tobacco box,
Lay snugly side by side.

The old man liked to stir the fire,
So, near him the tongs were kept;
Sometimes he mused as he gazed at the coals,
Sometimes he sat and slept.

What did he see in the embers there?
Ay! pictures of other years;
And now and then they wakened smiles,
But oftener started tears.

His good wife sat on the other side,
In the high-backed flag-seat chair;
You see 'neath the frill of her muslin cap
The sheen of her silvery hair.

She wears a "blue checked" apron now,
And is knitting a sock for *him;*
Her pale blue eyes have a gentle look,
And she says "they are growing dim."

I like to call and tell the news,
And chat an hour each day,
For it stirs the blood in an old man's heart
To hear of the world away.

Be kind unto the old, my friends,
They're worn with this world's strife,
Though bravely once perchance they fought
The battle here with life.

They taught our youthful feet to climb
Upward life's rugged steep;
Then let as lead them gently down
To where the weary sleep. [N. E Farmer.

ART OF MILKING.

The art of milking well, is not taught in a hurry. It requires long practice to milk properly, and, therefore all the young people on a farm ought to be shown how the labor should be done. It is quite important that this branch of the dairy should be particularly attended to, for a good milker obtains at least a quart more from the same cow than a poor milker.

The first lesson to be taught to young people is gentleness and kindness to the cows. They never need be treated harshly in case the business is properly commenced. Cows that have been caressed and uniformly well treated are fond of having the milk drawn from the udder at the regular time of milking, for it gives them relief from the distention of the milk ducts.

Let young people be put to milking the farrow cows first, or such as are to be soon dried, and then the loss from bad milking will be less injurious; the hand should extend to the extremity of the teats, for the milk is then drawn easier. They should be taught to milk as fast as possible.—More milk is always obtained by a rapid milker than by a slow one. They should therefore, be taught to think of nothing else while milking, and no conversation must be permitted in the milk yard. They should sit up close to the cow and rest the left arm gently against her shank. Then if she raises her foot on account of pain occasioned by soreness of the teats, the nearer the milker sits to her, and the harder he presses his left arm against her leg, the less risk will he run of being injured.

Cows may be taught to give down their milk at once—and they may be taught to hold it a long while, and to be stripped indefinitely. The best way is to milk quick and not use the cow to a long stripping or an after stripping. [Northern Farmer.

SINGULAR ARITHMETICAL FACT.—Any number of figures you may wish to multiply by five will give the same result if divided by 2, a much quicker operation; but you must remember to annex a cipher to the answer when there is no remainder, and when there is a remainder, whatever it may be, annex a 5, to the answer. Multiply 464 by 5, and the answer will be 2,320: divide the same number by 2, and you will have 232, and as there is no remainder, you add a cipher. Now take 357, and multiply by 5, the answer is 1,785. On dividing this by 2 there is 178 and a remainder; you therefore place a 5 at the end of the line, and the result is again 1,785.

FORTY DOLLAR PEAR TREE.—Mr. C. A. Nealey, formerly a resident of this town, but now a farmer at Eddington, in Penobscot County, hauled into the village last Tuesday morning, forty bushels of pears, and in one hour retailed all of them from his wagon at two dollars a bushel. The pears were of a superior quality, and bought expressly for making preserves. Mr. N. informed us that he gathered twenty bushels of the lot from one tree. We should think that the farmers in this region might take the hint—it costs but a trifle to grow the trees. [Ellsworth American.

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EDITOR'S TABLE.

TO AGENTS AND FRIENDS.

We cannot withhold our hearty thanks, for the many favors from all our kind friends and active agents thro'out the state, and the north-west; for their zealous interest, and energetic labors, to promote the circulation of the FARMER. We already have a goodly subscription list, although not more than half as large as we mean to, and must have, by the first of June.

We have made our mark for 10,000 subscribers this year, and are printing an edition to supply that number. There must be at least 100,000 farmers and business men within the compass of our circulation, and we feel that a paper as well gotten up and cheap as the FARMER ought to have, at least, one in ten of them, as readers and subscribers. We are providing plenty of extra copies, for all new subscribers, during the whole year, on the supposition that most would want the complete volume for binding at the end of the year.

We mean to make the WISCONSIN FARMER a desirable appendage to every public and private library in the west, from now on; and we shall take great pains, and pleasure, in supplying all missing numbers to subscribers.

We hope our agents (and we want every subscriber to consider himself an agent, so far at least as to get his neighbors to subscribe,) will not remit or flag in their labors, but keep adding to their clubs and individual subscriptions, until we cry enough, which we shall not probably do right off. Yes, friends, we say, labor for yourselves and for us, and in the end we will all be glad of it beyond a doubt.

To that portion of our friends who complain of the irregularities of the FARMER under its former management, we would say that nothing of the kind will be apt to occur, "under the present administration."

We are matter of fact men, and aim to perform all we undertake, at least as well as we promise. We simply ask all who will, to try us for the current year, and we will risk the verdict. We consider this year but the beginning of a long, agreeable, and mutually profitable acquaintance, between ourselves and many of the best men and women of the great west.

In conclusion, to all such we would say, we mean as the years roll on to merit your confidence and esteem, and if so fortunate as to receive it, we shall deem it our richest reward.

Stern, cold winter, still holds on in its course, and as yet, manifests but little disposition to let go its grasp. Its early commencement, and unparalleled severity, thus far, will cause it to be long remembered, in all sections of the country—south and east, as well as west and north. Texas, even, has been favored with sleighing, and icy bridges over its streams; and Florida, with decidedly cold weather. But old Sol is at length beginning again to climb up the ladder that leads to the smiles of Spring; and all who are affected by the rigors of winter, will pray for a speedy ascent, and a quick coming of that most delightful of all seasons of the year—when everything seems young again and happy. Meantime, let us keep good fires, and make as much as possible of the long evenings. The genial, cheerful glow of feeling, begotten by social and brotherly and sisterly intermingling, is well worth its cost, and pays a large per cent. of pleasure on the investment.

Then let us make the most of each season as it passes; and each in its turn does pass, like the changing scenes of a theater—and to each of us in turn a few changing scenes will close the play.

WISCONSIN MIRROR.—We have received the few first numbers of a paper recently started at Newport, Columbia County, by A. HOLLEY, editor and proprietor. It bears unmistakable evidence of being conducted with more than ordinary ability, and we doubt not will receive the support it so richly deserves. We frequently hear the publishers of papers complaining bitterly for want of patronage and due appreciation of their valuable services; but we think in ninety-nine cases out of every hundred where a paper is poorly supported that the fault commences at home. Let every editor look well to making his paper interesting, and, our word for it, the intelligent portion of any community will see that it, or its editor, is not allowed to go hungry. The American people, as a general thing, are not so public spirited as to wish to support any man just because he owns a press and a few type, and hires a jour. printer and *devil* to get out a sheet weekly, filled with old telegraphic news, or long prosy political articles. May be the editor is a hard working industrious man at the case, and uses his scissors dextrously—but what do his readers care for articles and paragraphs which nine—or more—out of every ten have seen in some other paper before he can reprint it? Let those who publish newspapers spare no pains in getting all important news items before their readers at the earliest practicable moment—but local papers should aim to interest their patrons by putting all important local transactions—not only of the village from whence they issue, but of the entire county or section in which they wish to circulate—on record; and they will not die out for want of paying subscribers. It makes but very little difference with the public whether a man is a "Whig" or "Democrat," if he shows by a straight forward, candid course that he is sincere in the principles he advocates—but any editor may rest assured that the majority of his readers will be dissatisfied if he devotes too much space to political jargon, in and out of season. Another and a serious mistake which many country editors run into, is, trying to publish too large papers. It is the poorest policy imaginable to try to increase the profits of an office by merely *enlarging* the sheet and consequent expenses of publication. A retired but very successful editor who used to publish a very neat, well filled, six column paper in this state, was frequently asked why he did not *enlarge*, and his reply was:—"It is not always the largest calf that makes the best veal"—and so we think; for tho' a calf may have a large frame, if it is not "filled out," the quantity and quality of the meat it will furnish is not equal to that of its less pretending but well-filled associates.

FARMERS OF Wisconsin, have you each a Platform Scale—one of the most convenient things that you can have in your barn or granary? It tells you how much grain you carry to mill and whether the wheat buyer cheats you in weight—facts that are often important to know. They are handy beyond degree for a thousand things, and would easily be worth their cost to any well regulated farmer every year.

We would refer all who may wish to buy to the advertisement of Fairbanks & Co., who were the inventors of the platform scale, and who never have been beat as manufacturers, and in our opinion never equalled. Their scales are always right, which is a matter of the highest importance. One that is only about right is no better than guess work.

ALL wishing Fruit Trees, ornamental shrubs, or choice seeds, would do well to read the advertisement of Mr. HENRY F. BOND, of the Mendota Nursery, who we understand has a very fine stock in his line,

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PLOWS.—Passing by the shop of Messrs. BILLINGS & CARMAN the other day, and hearng the music of many hammers, our attention was attracted to their extensive business operations, which, on a more thorough examination, we found to be of just the kind to meet the varied and extensive wants of our farmers, the coming Spring. We could not help reflecting on the vast difference between the crotched stick of the Roman, or even the modern Mexicans, with which they root the ground, and the gracefully formed, splendidly polished, and finely tempered cast steel plows of the present. Yes, cast steel plows! Messrs. B. & C. are making as fine a quality of cast steel into even the very mouldboards of their plows as would be needed for the finest cutlery. The consequence will be, that they will wear as much better, and brighter, than a common coarse made plow, as a Collins' axe will exceed a coarse, old-fashioned blacksmith's job. Even their breaking plows are made of the finest stock, which, after running a little, polish so bright that their draught is remarkably easy. We used one of them last season, cutting sixteen inches, which four horses handled on the prairie admirably. We would say to all farmers in this region of the state, wanting, as near as may be, a perfect plow, to examine the work turned out by this establishment; and if an examination does not suit them, a trial of them will, we are sure. Farmers of Dane, Columbia, and Sauk, and all the country round about, improve your earliest opportunity to examine the plows of Billings & Carman. Or, if more convenient, look into the establishment of Messrs. Winchester & De Wolf, at Whitewater. We have also been using their plows on our farm for the last three years, and can recommend them as A No. 1. We understand that they are making thousands of them for the coming season. For further particulars, see the advertisements of both the above establishments in our advertising columns.

REAPERS.—Farmers are already bargaining for their reapers for the coming harvest, and among the multitudes that are offered, the question with every man is, which one he had better buy?—whether a Self-Raker, or simply a reaper. This is one point on which we will not presume to advise, as every man may just as well decide for himself. But this much we do say—we believe we are advertising two as good machines, one of each kind, as there is in America. MANNY & Co., of Rockford, Ill., are perhaps the largest manufacturers in the world, and the fame of their machine is well known and richly merited. For simplicity, durability, convenience and lightness of draught, they are neither rivalled nor likely to be. We have used one of them during the past harvest, and we would not exchange it for any hand raking machine in existence.

On the other hand, if one wishes a Self-Raker, we know of no one more highly esteemed by the many who have used it, than SEYMOUR & MORGAN'S. Its self-raking apparatus is simple, yet ingenious, light and durable—and it handles the grain to perfection. Farmers cannot go astray in buying either of these machines. Either of them will pay for itself in a single season, if a man has any amount of grain to cut.

GOLDEN DROP WHEAT.—We would call attention to the advertisement of T. C. DOUSMAN, Esq., who offers the above kind of wheat for sale. It is highly spoken of, by those who have given it a trial during the last year.

It was extensively circulated, in small parcels, by the State Agricultural Society, during the last year, and so far as we have heard, gave universal satisfaction, except in a few instances, when people received lots from a parcel that was, through some mistake, mixed and impure. At the State Fair, it took not only the first, but also the second premium, and was considered by all as incomparably the finest of anything seen.

It strikes us as good policy, for those who mean to be up to the times, to give it a trial. If it is really better than the club wheat, for common cultivation, it is an important fact for farmers to know.

We tried the Rio Grande wheat last year, on the prairie soil; it grew altogether too much to straw, and made a very poor yield of wheat—not being more than three-fourths as good as the club wheat which grew by the side of it. But the Golden Drop is said not to be liable to this objection. The Rio Grande, however, may do well on the openings.

WE would call the attention of the enterprising farmers of the state to the advertisement of the State Agricultural Society, on page 92. It is well worth the consideration of all who feel an interest in our progress as an agricultural people. All who join the society will inevitably get two or three times their money's worth in books, choice seeds, roots, &c., &c., Occupying as we do the position of distributing agent under the direction of the society, we shall take particular pleasure in reciprocating favors to the friends and members of the society, many of whom are among the best friends of the FARMER.

MESSRS. TIBBITS & GORDON advertise everything in the way of agricultural tools and machinery, and are just the men to make their words good. Their stock embraces everything that can be desired by the farmer or business man, and in extent and variety is not surpassed in the interior west. All men doing business at Madison should look through their establishment. No one will fail to find a complete assortment of all they need. Their Barker's Pump is the best thing yet for the deep wells of the prairies. They are selling Seymour's Patent Seed Drill, Billings & Carman's Cast Steel Plows, and the best of everything in their way. Farmers of Central Wisconsin, read their advertisement on page 92, and give them an early call.

WESTERN ENTERPRISE is the name of a new paper just started in Chicago, the first and second numbers of which lie upon our table. It is devoted to agriculture, science, education, literature and the mechanic arts. E. PORTER LITTLE, Proprietor. Terms $2,00 per annum in advance. This paper bids fair to be an able co-worker in the extensive field it has chosen for its operation, and we therefore anticipate and wish for it ample success.

LAKE MILLS NURSERY.—The proprietors of this establishment, offer a fine assortment of everything in their line, as will be seen by reference to their advertisement. We can commend them to the patronage of all within convenient distance, in want of Fruit and Ornamental Trees.

THOSE wishing fine Southdown Sheep will be interested in the advertisement of Mr. JAMES S. ROGERS, who offers some of the finest of that desirable quality of sheep for sale. They are the thing for mutton.

THE advertisement of Messrs. WINCHESTER & DEWOLF, of Whitewater, will be found in this number of the FARMER. They are among the first in their line of business, and their plows are among the best.

ROCK COUNTY NURSERY.—We would call the especial attention of the people of Rock County and vicinity who are preparing to set orchards, &c., the coming spring (and we hope everybody who has not done so will,) to this fine nursery, where everything they wish can be found, of the finest quality, and cheap enough to satisfy all buyers. Those who want good trees, should go early after the frost is out.

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Seeds From The Patent Office.

STATE AGRICULTURAL ROOMS,
MADISON, FEB. 1856.

WE WOULD say to the friends of the State Agricultural Society, that we are receiving large and choice varieties of Imported Seeds, from the Patent Office—embracing many rare and choice articles of Garden Fruit, Hedge and Forest culture; collected by agents of the Government, from all parts of the globe. All of which we propose to distribute among the members of the Society. We call attention to the subject for the puspose of apprising those who have not yet become members of the Society, for 1856, to do so at their earliest convenience.

By paying one dollar to the Secretary in person, or remitting it by mail, you become a member of the Society, and are entitled to a volume of the Transactions, (worth one dollar and fifty cents,) to a share of the Seeds, &c. &c., and a free ticket of admission for yourself and family, at the State Fair. Farmers of Wisconsin, how can you invest a dollar better? Gentlemen, forward your names, and money, in season to get the seeds for Spring's planting. The names first registered will be first supplied, which may make some difference, if the supply does not equal the demand. D. J. POWERS,
Feb. 1856. *Act. Secretary.*

SEED WHEAT.

I HAVE EIGHT HUNDRED BUSHELS OF PURE "Golden Drop" Spring Wheat, which I offer for sale, delivered at Genesee, on the Milwaukee & Mississippi R. R., or at Oconomowoc, on the Milwaukee & Watertown R. R., at two dollars per bushel.

I purchased my seed in Canada, last spring, and from its reputation there, and my experience here the past season, I am confident that it will supercede the "Canada Club," as an early variety, and for an abundant yield, on its introduction amongst our farmers.

All orders enclosing the money will be promptly attended to. Purchasers may forward their own bags, or the usual charge for such packages will be retained.
T. C. DOUSMAN.
WATEVILLE, Waukesha Co., Wis., Feb. 1,—t.f.

CHICAGO AGRICULTURAL
Warehouse & Seedstore.

Warehouse and Sale Room 45 Franklin Street, between John and Randolph Streets.

THE subscriber, formerly connected with the "*Albany Agricultural Works, Albany, N. Y.*" has opened a Depot in Chicago, where may be found at all times a complete assortment of
FARM MACHINERY AND IMPLEMENTS,
of the most approved kinds—also a full stock of the best

Garden and Field Seeds.

☞ Full catalogues furnished *gratis* on application.
HENRY D. EMERY.
Feb. 1, 1856. 2m.

CHOICE SEEDS.

500 BUSHELS of Clover and Timothy—One Hundred Bushels Superior Millet Seed—Five Hundred Bushels assorted Spring Wheat—One Hundred Bu. Peas—Osage Orange Seeds, and Plants—with a full stock of Garden and Field Seeds—Farm Implements, &c., for sale at 45 Franklin Street, Chicago, Illinois.
Feb 1, 1856.—2m. H. D. EMERY & CO.

Little Giant Corn and Cob Mill.

DOUBTLESS, this is one of the most important inventions of modern times, for the farmer and stock grower. Its simplicity and durability recommend it to every one desiring such a machine. It occupies but little space, and is easily operated by any farm hand.

Prices, from $40 to $65. For sale at the Chicago Agricultural Warehouse and Seed Store, 45 Franklin Street, Chicago, Ill. HENRY D. EMERY.
Feb. 1, 1856. 2m.

Emery's Patent Portable Horse Powers.

SEPARATORS, Threshers, Saw Mills, Corn Shellers, Feed Cutters, &c., for Sale at 45 Franklin Street, Chicago, Illinois. HENRY. D. EMERY.
Feb. 1, 1856. 2m.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:
"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GABDEN SEED "
" " " HORSE POWER THRESHER,
" " " CORN PLANTER:
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:
One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz. Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.
The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.
TIBBITS & GORDON.
MADISON, Feb. 1856. t.f.

SEYMOUR & MORGAN'S
PATENT IMPROVED NEW YORK
SELF-RAKING REAPER,
WITH MOWER ATTACHED!

THE SUBSCRIBER has obtained the agency for, and now offers for sale in the State of Wisconsin, these Reapers—manufactured by a firm who have probably had more experience in the business than any other in the United States, and who have been conducting a series of careful and expensive experiments, for years past, to *perfect* a Self-Raking Reaper. They have succeeded, and now offer their unequalled Reaper to the farmer—*warranting it* to cut, and lay off in good bundles, from ten to twenty acres per day, with *one man and team*; also, warranted to be made of the best materials.

TERMS:—Fifty Dollars paid when taken—remainder in six months. Money refunded if not as represented.
P. S.—Circulars and descriptions sent to applicants.
Address S. S. SHELDON.
Madison, Feb. 1, 1856. t.f.

LA CROSSE and MILWAUKEE R. R.
GEO. H. GREEN & CO.,
PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.
Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Madison, Wis., Feb. 1856. t.f.

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MADISON PLOW FACTORY.

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel plows which we will sell cheaper than any other plow of the kind ever offered in this market.

We would also call your attention to our Breaking Plows, and we feel confident their equal cannot be found east or west, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

☞ TIBBITS & GORDON are the only Agents in Madison.

C. H. BILLINGS. S. H. CARMAN.
MADISON, Feb. 1, 1856. t.f.

MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Quince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Symigas, Calycarthuses, Enonymusses, Honeysuckles, Bignonias, Prairie and other Roses —Dahlias, Gladioluses, Tulips, &c., &c.

Osage Orange seed for sale. Orders sent by mail will receive prompt attention. H. F. BOND.
MADISON, WIS., Feb., 1856. t.f.

To Farmers and Gardeners.

YOUR attention is called to the Manures manufactured by the Lodi Manufacturing Co. from the contents of the Sinks and Privates of New York City, and free from offensive odor, called

POUDRETTE AND TAFEU.

Poudrette is composed of two-thirds night soil and one-third decomposed vegetable fibre. Tafeu is composed of three-fourths night soil and one-fourth No. 1 Peruvian Guano.

These manures are cheaper and better adapted for raising Corn, Garden Vegetables and Grass, than any other in market. Can be put in contact with the seed without injury, and causes Corn and seeds to come up sooner, ripen two weeks earlier, and yield one third more than other manures, and is a *sure preventative of Cut Worm.*

Two bbls. Poudrette or 100 lbs. Tafeu, will manure an acre of Corn in the hill. Tafeu 1 3-4 cents per lb. Poudrette $2, per bbl., or $1,50 for any quantity over 7 bbls., delivered on board vessel or Railroad, free from any charge or cartage. A pamphlet, containing every information, sent postpaid, to any one sending their address to

THE LODI MANUFACTURING CO.,
feb.2m 60 Courtland-st., New York.

Fairbank's Patent Scales.

These Scales have been long known, and have stood the severest test, and are always right. Judicial decisions have been made in several of the States, within the last few years, where a discrepancy in weights was the matter in controversy, and in every case has been decided in favor of the party using Fairbank's Scales, and upon the grounds that they are the standard Scale.

The genuine Fairbank's Scales are manufactured by E. & T. FAIRBANK'S & Co., under the supervision of the original Patentee, at St. Johnsbury, Vermont, and at no other place. Rail Track—Railroad—Depot—Warehouse—Miller—Hay—Coal—Farmer's—Cattle—Platform and Counter Scales, of every size and modification, for sale at manufacturer's prices, and warranted, both for accuracy and durability, by C. L. HARMON & Co., 197, South Water St., Chicago; LANSING BONNELL, 89 & 91, East Water St., Milwaukee; and by B. H. CHADBOURN, General Agent, 197, South Water St., Chicago.
Jan'y. 1, 1856. t.f.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,
PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promply and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis., L. A. WINCHESTER, WM. DeWOLF.

ROCK COUNTY NURSERY.

Situated in the Southern Limits of the City of Janesville, (East side of the River) on the Telegraph Road to Beloit.

THE proprietors have now for sale a large stok of trees, at prices which cannot fail to suit purchasers, and having devoted their entire attention to their propagation and growth, having been to much expense in obtaining scions from bearing trees they feel warranted in recommending them to the public.

APPLE TREES 5 to 8 feet high 16 cts each or $140 per thousand.

PEAR, PLUM, and CHERRY, all of which are furnished Dwarf or Standard from 30 to 50 cts. each.

Those of extra size with fruit buds additonal prices.

We would call particular attention to our stock of Evergreens, Ornamental Shrubbery, Bulbs, Roses, Plants &c., which we think is not excelled at the west. Nursery stocks, and scions furnished on liberal terms. Trees carefully packed for any part of the United States.

Catalogues sent gratis on application.
COLBY & WILLEY.
Jan. tf.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.
TIBBITS & GORDON.
Jan.

D. S. DURRIE,

Wholesale and Retail Dealer in

BOOKS & STATIONERY,

BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.
January, tf.

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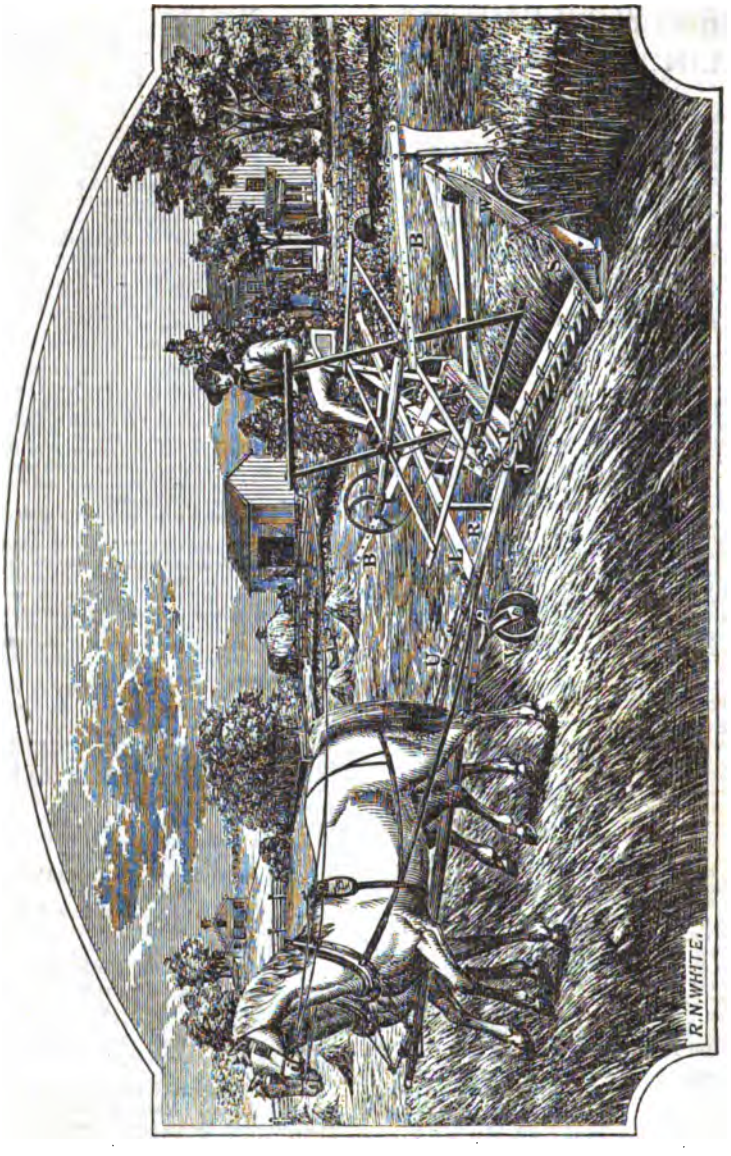

MANNY'S REAPER AND MOWER COMBINED—AS MOWING.

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation added, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - - $135.
For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - - - - $145.
For Single Mowing Machine, of about 5 feet cut, $120.

Descriptive Pamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & CO., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices,

AT THE OFFICE OF THE WISCONSIN FARMER!

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UNIVERSITY OF WISCONSIN.

BOARD OF REGENTS.

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J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
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EZRA S. CARR, M. D., Professor of Chemistry and Pharmacy.
D. C. AYERS, M. D., Professor of Obstetrics and Diseases of Women and Children.
GEO. D. WILBUR, M. D., Professor of Materia Medica.
——— ———, Professor of Surgery.
——— ———, Professor of Anatomy.
——— ———, Professor of Jurisprudence.

The vacant chairs of Medicine will, probably, be filled at the annual meeting of the Board of Regents, in January, and the Department will be opened as soon thereafter as shall be deemed advisable.

The First Department of the University, namely, that of "SCIENCE, LITERATURE AND ARTS," may now be regarded as completely organized; though the Professors, elect, of Mental Philosophy and of Chemistry, will not enter upon the duties of the Chairs, till the first of January, 1856—the beginning of the second term of the Collegiate year.

The number of students attendant on the instructions of the year just closed, (July 25, 1855), has been ninety-two; and a large increase is looked for under the new and full organization of the Collegiate Faculty.

INSTRUCTION.

The Collegiate Faculty will hold three regular terms of instruction annually, of thirteen weeks each, beginning:—

1. On the third Wednesday of September;
2. On the first Wednesday of January;
3. On the fourth Wednesday of April.

COMMENCEMENT, on the fourth Wednesday of July.

Teachers' Classes will annually receive professional instructions in Didactics, or the Art of Teaching, from Professor Read, of the Chair of English Literature.

Classes in Agricultural Chemistry will be formed each year, and receive instructions from Professor Carr, during our second term, and simultaneously with the session of the Legislature.

ACCOMMODATIONS.

The second College edifice has just been completed, and will be open for the accommodation of students in September. In the two buildings there are forty private studies, and about double that number of lodging rooms; besides ample public rooms for recitation and lecture. In the south wing of the new building are apartments for the residence of some of the families of the Faculty.

BOARD.

The large dining hall in the new building will be open for the accommodation of students, in connection with the families of the resident Faculty. Board of good quality will be furnished in the hall, at the family tables of the Professors, at or under two dollars per week. In order to carry out this plan with economy and safety, it has been ordered by the Executive Committee, that the student, on entering the hall, shall deposit with the Treasurer $25 for the term of thirteen weeks, or a *pro rata* for any less time; the proper drawbacks to be paid over at the close of the term.

EXPENSES.

TUITION FEE, per term of thirteen weeks,...	$4,00
ROOM RENT, INCLUDING HEAT, do. ...	3,00
Contingencies,.....	0,00
Total for the year, (three terms),.....	$21,00

It is believed that the policy of the Board of Regents, in thus completing the appointments of the University, and adding greatly to its educational capabilities, as well as their further endeavors to render membership both economical and safe, will be met by a just public confidence, and a correspondent enlargement of patronage.

Additional information, relative to the University, may be obtained by addressing any member of the Board of Regents, or of the Faculty. JOHN H. LATHROP.

Madison, Jan. tf.

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RHODES' FEVER AND AGUE CURE.

OR ANTIDOTE TO MALARIA,

FOR THE PREVENTION AND CURE OF

Fever and Ague, or Chill Fever; Dumb Ague, and other Intermittent and Remittent Fevers; also of Bilious Fevers, accompanied by Typhoid Symptoms; Typhoid Fever, Yellow Fever, Ship and Jail Fever, General Debility, Night Sweats, and all other forms of disease

WHICH HAVE A COMMON ORIGIN IN

MALARIA OR MIASMA.

This subtle atmospheric poison, which at certain seasons is unavoidably inhaled at every breath, is the same in character wherever it exists,—north, south, east, or west,—and will every where yield to this newly discovered ANTIDOTE, which neutralizes the poison, completely purifies the system, and thus entirely removes all the cause of disease.

The proprietor distinctly claims these extraordinary results from its use:

It will protect any resident or traveller, even in the most sickly or swampy localities from any ague or bilious disease whatever, or any injury from constantly inhaling Malaria or Miasma.

It will instantly check the ague in persons who have suffered for any length of time, from ONE DAY to TWENTY YEARS, so that they need never have ANOTHER CHILL, by continuing its use according to directions.

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Because of its

SINGULAR AND ENTIRE HARMLESSNESS,

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JAMES R. CHILTON, M. D., Chemist."

This allows of its

FREE USE AS A PREVENTIVE

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PROOFS OF EFFICACY are frequently published, and the confidence of the public is asked only in proportion to its *actual merits* wherever introduced and used. These only are relied upon to prove its worth.

One or two bottles will answer for ordinary cases; some may require more. Directions printed in German, French and Spanish, accompany each bottle. Price One Dollar.

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JAMES A. RHODES, Providence, R. I.

STAINE & COOPER, Agent, Madison, Wis.

And for sale by druggists generally. [Jan.

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CATHARTIC PILLS

Are Curing the Sick to an extent never before known of any Medicines.

Invalids, Read and judge for Yourselves!

JULES HAUL, Esq., the well known perfumer of Chestnut street, Philadelphia, whose choice products are found at almost every toilet, says:

"I am happy to say of your CATHARTIC PILLS, that I have found them a better family medicine for common use, than any other within my knowledge. Many of my friends have realized marked benefits from them and coincide with me in believing that they possess extraordinary virtues for driving out diseases and curing the sick. They are not only effectual but safe and pleasant to be taken, qualities which must make them valued by the public, when they are known."

The venerable Chancellor Wardlaw, writes from Baltimore, 15th April, 1854:

"Dr. J. C. AYER—Sir: I have taken your Pills with great benefit, for the listlessness, languor, loss of appetite, and Bilious headache, which has of late years overtaken me in the spring. A few doses of your Pills cured me. I have used your Cherry Pectoral many years in my family for coughs and colds, with unfailing success. You make medicines which *cure*, and I feel it a pleasure to recommend you for the good you have done and are doing."

The widely renowned S. S. STEVENS, M. D., of Wentworth, N. H., writes:

"Having used your CATHARTIC PILLS in my practice, I certify from experience, that they are an invaluable purgative. In cases of disordered functions of the liver, causing headache, indigestion, costiveness, and the great variety of diseases that follow, they are a surer remedy than any other. In all cases where a purgative remedy is required, I confidently recommend these Pills to the public, as superior to any other I have ever found. They are sure in their operation, and perfectly safe, qualities which make them an invaluable article for public use. I have for many years known your *Cherry Pectoral* as the best Cough medicine in the world, and these Pills are in no wise inferior to that admirable preparation for the treatment of diseases."

Capt. JOEL PRATT, of the ship Marion, writes from Boston, 20th April, 1854:

"Your Pills have cured me from a Bilious attack, which arose from a derangement of the Liver, which had become very serious. I had failed of any relief by my Physician, and from every remedy I could try, but a few doses of your Pills have completely restored me to health. I have given them to my children for worms, with the best effects. They were promptly cured. I recommended them to a friend for costiveness, which had troubled him for months; he told me in a few days they had cured him. You make the best medicine in the world, and I am free to say so."

Read this from the distinguished Solicitor of the Supreme Court, whose brilliant abilities have made him well known, not only in this but the neighboring States.

NEW ORLEANS, 5th April, 1854.

Sir: I have great satisfaction in assuring you that myself and family have been very much benefitted by your medicines. My wife was cured, two years since, of a severe and dangerous cough, by your CHERRY PECTORAL, and since then has enjoyed perfect health. My children have several times been cured from attacks of the Influenza and Croup by it. It is an invaluable remedy for these complaints. Your CATHARTIC PILLS have entirely cured me from a dyspepsia and costiveness which has grown upon me for some years—indeed, this cure is much more important, from the fact that I had failed to get relief from the best Physicians this country affords, and from any of the numerous remedies I had taken.

"You seem to us, Doctor, like a providential blessing to our family, and you may well suppose we are not unmindful of it. Yours respectfully,

LEAVITT THAXTER."

"SENATE CHAMBER, April 5th, 1854.

Dr. J. C. AYER—Honored Sir: I have made a thorough trial of the Cathartic Pills, left me by your agent, and have been cured by them of the dreadful Rheumatism under which he found me suffering. The first dose relieved me, and a few subsequent doses have entirely removed the disease. I feel in better health now than for some years before, which I attribute entirely to the effects of your Cathartic Pills. Yours with great respect,

LUCIUS B. METCALF.

The above are all from persons who are publicly known where they reside, and who would not make these statements without a thorough conviction that they were true.

PREPARED BY

Dr. JAMES C. AYER,

PRACTICAL AND ANALYTICAL CHEMIST,

LOWELL, MASS.

Sold by Carey & Gordon, Beloit; Holden, Kemp & Co., Janesville; J. K. Ellert, Monroe; John Wright, Madison; E. R. & F. A. Utter, Elkhorn; T. Mason, Dubuque, Iowa; E. E. Gay, Burlington, Iowa; and by all Druggists everywhere. v7n9: 6m.

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THE undersigned are prepared to furnish, at reasonable prices, STANDARD TREES of the leading varieties of

APPLE, PEAR, CHERRY, PLUM, APRICOT, CURRANT, GOOSEBERRY.

Also a fine stock of Evergreens and Ornamental Shrubbery, Flowering Bulbs; three of the best varieties of Pie Plant and Asparagus Plants; Acacia and Osage Orange Trees.

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Please call and examine, at PLUMB & Co.'s Nursery, Lake Mills, Jefferson County, Wis.

J. C. PLUMB,
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Oct., 1855-6m.

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WITH ADDITIONAL IMPROVEMENTS FOR THE HARVEST OF 1856.

First Grand Silver Medal

FOR the best Reaper & Mower at the Paris World's Fair Exhibition, 1855. Awarded to John H. Manny, and the machine purchased by Prince Napoleon for his estate in preference to all others. Several thousand of these machines are being manufactured with all their improvements for the next harvest, and warranted superior to any other harvesting implement, all orders promptly attended to, Address

MANNY & CO.,
Rockford, Illinois.

Jan. tf.

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And Counties Adjoining.

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Take this method of informing you *all*, that you are abundantly able to come up to the *Excelsior Picture Gallery* with your families, young and old, and be either *Daguerreotyped*, *Photographed*, or *Ambrotyped*, which ever suits you best, either of which will be done in the highest style of art, and warranted to give satisfaction or no sale.

Those who desire Photographic views of their farmhouses, and yards, be they log cabins, or gilded palaces, can have them done on short notice, either plain or beautifully colored in oil colors, at a trifling expense.

Fine gold lockets, pins and rings for sale.

Don't miss the place.

Enquire for the *Excelsior Gallery* and for your humble servants, JOHNSON & FULLER.

Madison, Jan. 1st, 1856.

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MARCH, 1856.

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

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MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

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1865, Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., MARCH, 1856. NO. 3.

SUGGESTIONS FOR MARCH.

Time in its onward march brings us again to the March of Spring-time. The elevation of old Sol in his daily orbit, is rapidly unloosing the terrible grasp of the coldest winter that many of us have ever seen—a winter that has frozen over the lakes of Florida, bridged the Mississippi five hundred miles lower down than common; and is even supposed to have bridged Lake Michigan from Milwaukee to Grand Haven. All, all wonderful in its way; but not half so important, practically, to the farmers of Wisconsin, as how their own animals, roots, fruit trees, &c., have fared. Such a cold winter should teach us practical lessons, and not a few. First, it should teach us, always to expect the worst when winter sets in, and prompt us to provide for it. No half-way rigging of houses, cellars, barns or stables—with the hope that the winter will be favorable—will answer.

We cautioned all the readers of the FARMER, in early winter, to bank and plaster up carefully, and be on the safe side; those who did so saved their potatoes, those who did not, lost them—when they were worth from six shillings to one dollar per bushel. Those who sheltered and took good care of their animals, find them coming out well even this spring; but those who sat by the fire, when they ought to have been rigging stables and sheds for them, and lay in bed mornings, when they ought to have been feeding, carding and tending them, will be exceedingly likely to pay a large crow tax, before grass grows.

Those who let their young orchard trees go into winter quarters without being carefully banked up, and secured from rabbits and vermin, will also be likely to pay a large fool (not poll) tax.

All of the aforesaid slack and easy sort of people will be heard sentimentally talking, and sighing over their *bad luck!*—words which are seldom or never found in a careful man's dictionary; but always in the mouths of fools, who charge all their small mishaps to "bad luck," and their large ones to "Providence!" But, enough in relation to the past; we will simply repeat the proverb, that Experience keeps a dear school—but there is a large class in the world that will learn in no other, despite all the FARMER can say.

As the warm days of early spring betoken the near approach of the busy season of field labor, it will be well to prepare for the campaign by carefully inspecting the accoutrements, not of war, but of the farm—the waggons, plows, drags, horse gear, chains, and all the lesser paraphernalia of every day use. Now is the time to have them all put in perfect order, and set in their places ready for use. Who can fully calculate the difference between having everything in the right shape, and always ready for each day's business—or having everything disjointed, and scattered, perhaps lent to some equally negligent neighbor, and, to cap the climax, all out of repair when the time comes for action? Unthrifty starts a boy to the neighbor's after a hoe, axe, or plow, when wanted—and the hired man stands idle—or next thing to it—until it comes; then it has to be fixed, which takes another half hour, and at nine or ten o'clock, the man who ought to have commenced early, with a good tool, begins his day's work with a poor one. We repeat, who can calculate the difference in the results, between good and bad management?

Next in order, after getting the tools all ready for work, is to examine into the seed department, and see if that is all right. Have you got your seed wheat and oats on hand?—and are they of fine quality? Are you going to sow any grass or clover seed? We hope so, for a great deal of it should be sown, throughout the state, and must be, before we make much butter and cheese, or

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grow a great deal of wool or fine stock. Farmers ought at least to commence on a scale sufficient to raise their own seed, for subsequent and more extensive sowing; as clover seed, at $8,00 and $10,00 per bushel, and Timothy seed at $2,00 are rather expensive for any considerable amount of sowing. We have the promise of an article from an experienced hand, on stocking down grass and clover fields, and hoped to have presented it in this number. We shall probably receive it in season for April. It is a highly important subject, and one to which our farmers must pay more attention, ere long.

Among other things, don't forget the garden—that all-important appendage to every well provided household. Those who wish to have early lettuce, peas and radishes, should sow them the first opportunity. Such as have a taste and fancy for still nicer, and early "fixins," such as cabbages, cucumbers, melons, tomatoes, cauliflowers, squashes, &c., should rig themselves hot-beds without delay, and have the plants coming forward.

A hot-bed, good enough for all common purposes, is a simple and easy enough thing to make. All that is necessary is, to rig a box or curb, two or three by four or five feet, dimensions, with the top a little slanting, and fitted with a glazed sash. Fill this box with coarse horse manure, partly full, on the top of which put six inches of good mellow soil, and plant your seed in it. The fermentation of the manure will soon cause the seed to germinate, if the earth is kept properly moistened. The sash can be left open in pleasant weather, and closed when it is cold or frosty. Another plan may be found on page 79, of the February number.

Whether you make a hot bed or not, don't fail to make all the requisite provisions for a good farmer's garden, for if we should happen along to take dinner with you, some fine day, we would give you due notice, we are very fond of "wegetables."

Take good care of your milch cows, as they are coming in, if you would have them do well, and give a good mess of milk, during the summer. Don't begrudge a good slop of bran and meal, twice a day, to all new milch cows, until ample grass comes.—It may seem expensive to buy feed, if you don't happen to have it, but we assure you it will more than pay, especially at the present high prices of butter and cheese. Pinching cows in spring, is the worst possible policy.

If the wood pile is not cut up and ready for summer use, get about it if possible, and have it out of the way. We have told you before, what bad policy it is to cut wood by the handful, through the hurry of summer with a dull axe. Avoid it, by all means.—Make up your minds each of you, that have not wood land enough on your farms, where you will plant your timber nursery this spring. Select a patch in some corner, of good, dry, well tilled land, and sow the Locust, without fail, and when they come up, weed them out and take as good care of them as you do of your corn. The consequence will be, that they will be large enough to set in field rows by another year, and the forest will then have been begun in good earnest.

Let not any man think it unworthy of his notice, or an idle experiment. If he will only plant and grow a forest of five, ten or twenty acres, according to the size of the farm, in five years it will be considered the finest thing entirely and worth the most money, in proportion to what it cost.

You who have not the seed, will find them advertised in this number by Mr. H. F. Bond of the Mendota Nursery, and H. D. Emery & Co., Chicago. A few shillings will buy enough for a whole forest. We hope to see such forests coming up all over the prairies, within the next five years and looking as neat, and ornamental as a well kept moustache, upon a dandy's face. We say to all our prairie subscribers, plant the forest, on your waste corners of land, and begin this very spring, if possible, so as to lose no more time. You cannot afford to wait.—You had better defer the orchard, if you wait for either.

Cranberries and Erysipelas.—The Niles (Michigan) Republican says:—"A lady visited our family a few days since, and stated that her daughter had the erysipelas very bad. We called to mind the remedy recommended by a New Haven editor. On returning home in the evening she found the disease spreading rapidly—it had assumed a frightful appearance. She immediately applied a poultice made of cranberries, which seemed to arrest it at once, and the second poultice effected a complete cure."

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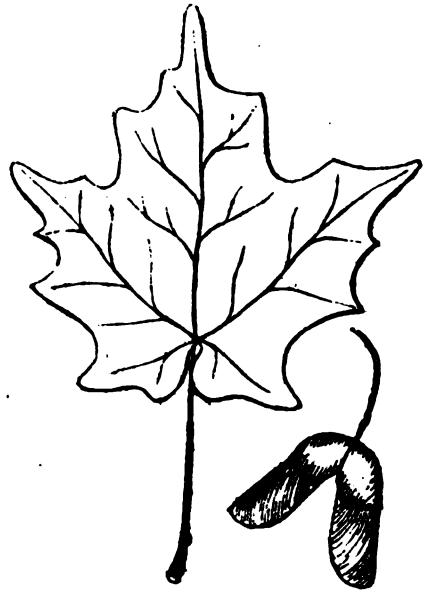
THE MAPLE TREES OF WISCONSIN.

BY L. A. LAPHAM, OF MILWAUKEE.

We continue the brief notices of our forest trees, commenced in the last number of the Wisconsin FARMER, by a few words on the subject of the maples. Plants are arranged in all recent botanical works, into natural groups, called *Families*, in which those species most resembling each other in essential characters are brought together. This method of classification is, on many accounts, far superior to the artificial classes and orders of Linnæus, where the number, situation, &c., of the stamens in the flowers were alone considered, and plants of the most opposite characters were brought together into the same class. One of these natural families is called ACERACEÆ, or the Maple family. This is a small family, consisting of only two or three genera, and it is quite distinct from all other groups of plants. So close are the different genera related, that some botanists still doubt whether they should not all be united into one.

9. *ACER SPICATUM*—MOUNTAIN MAPLE.

Acer spicatum of Lamarck, the Mountain Maple, is so small as hardly to deserve the name of a tree. It grows about wet, springy places on hill sides, near rocks, &c. It makes rather an ornamental appearance, the numerous racemes of flowers standing erect above the leaves, are soon followed by the bright red fruit. I am not aware of any useful purpose to which it has been applied. The Mountain Maple is found in the forests throughout this state; but as it has not been detected in Illinois, we are probably on its southern geographical limits. It extends eastward to Maine, but its western limits are not known. The leaves assume a yellowish red color in autumn, adding much to the beauty and interest of the species for ornamental purposes. The young twigs are bright green; the bark of the trunk, bright gray. The flowers appear in May, and the seed is ripe in August. The seed with slightly diverging wings resemble those of the sugar maple in form, but are much smaller, more delicate, and of a very different color. Our figure of the leaf is half the natural size; and of the fruit, the full size.



10. *ACER SACCHARINUM*—SUGAR MAPLE.

Acer saccharinum, of Wangenheim, the Sugar Maple. This well known and highly valuable tree forms dense groves in many places, but more especially in the eastern and northern parts of the state. Some of these groves, called "maple openings," are among the most beautiful and interesting of our forest scenery. These groves often occupy the sites of deserted Indian villages, being the first to take possession of the abandoned grounds. The wood is in great demand for various useful and ornamental purposes; and thousands of the trees are annually "tapped" to draw sap for the manufacture of "maple

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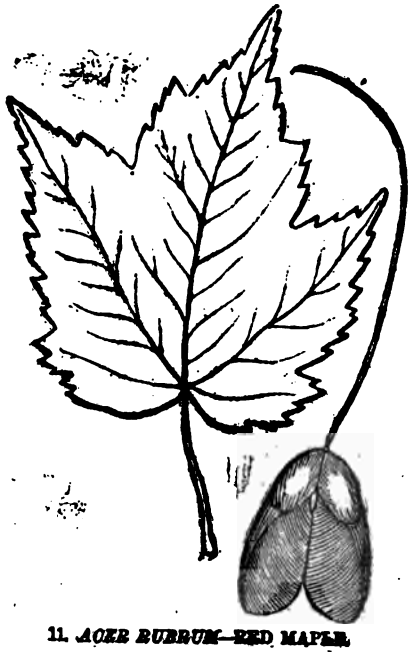
sugar." Over six hundred thousand pounds are annually made in Wisconsin.

The Sugar Maple is often, and very deservedly employed as an ornamental tree about the streets of towns and cities; its beauty of form, bright green foliage, and the brilliant autumnal tints assumed by the leaves, are so many very desirable qualities in this fine tree for such purposes. But the slowness of its growth is quite an objection in this "fast age;" hence, the Sugar Maple should be planted alternately with some more rapidly growing species that can be cut away when the maple has attained a sufficient size to answer the purposes of ornament and shade. Another very serious objection to this tree is, the temptation recurring every spring to tap it for the sweet sap it then contains—thus materially injuring the tree and retarding its growth. It is a principle laid down in the books on ornamental and landscape gardening, that all trees having useful qualities should be avoided in making selections for these purposes; thus removing all temptation to destroy the ornamental by converting them into the useful. Though the sap of all the maple family contains sugar, this is the only species that affords it in such abundance as to be of much practical value. The Black Maple, (*Acer nigrum Michx.*) is



11. *ACER RUBRUM*—RED MAPLE.

only a variety of the Sugar Maple; not having permanent characters to distinguish it from that species. The flowers of the Sugar Maple appear in May; and the seeds are ripe in September. Figure 10 represents a leaf and the ripe fruit, both reduced to one half the natural size.

Acer rubrum, of Linnæus, the Red Maple, is also too well known to need description here. It prefers low damp situations along the margins of rivers, &c., but flourishes very well in the higher lands. The brilliant scarlet flowers are among the earliest to appear in the spring, preceeding the leaves and covering the tree as with a beautiful mantle. The young shoots are also red, contrasting finely with the green leaves. It is therefore one of our most ornamental trees, and is often transplanted to the streets and yards of our towns and cities. The Red Maple is a moderate sized tree, seldom attaining the height of the sugar tree; it has a rapid growth; and the wood, though very valuable, is inferior to that species. The flowers appear in April or May—sometimes even in March—and the fruit ripens in August or about the first of September. Figure 11 represents a small leaf, and the fruit, both of the full size of nature.

Negundo aceroides, of Moench, the Box Elder. This tree was placed by Linnæus under the genus Acer, but later botanists have constructed for it a new genus, (Negundo,) on account, chiefly, of the pinnate leaves, and the want of petals in the flowers. It is quite common along the Mississippi river in this state, and extends eastward as far as the Rock river valley. In the Atlantic states it does not reach north of Pennsylvania; but at the west it is found on the Saskatchawan river, as far as the 54th degree of north latitude. Here, according to Sir John Richardson, the natives make a very dark colored sugar from the sap of this tree. The Box Elder is a small tree; the foliage and young twigs light green. The growth is quite rapid —fifteen or twenty years being sufficient to bring the tree to maturity. It is deemed quite an ornamental and desirable tree in England, where it was introduced from this country as early as 1618.

Like the red maple, this tree grows most naturally in the low rich grounds along the margins of rivers; and in such situations it

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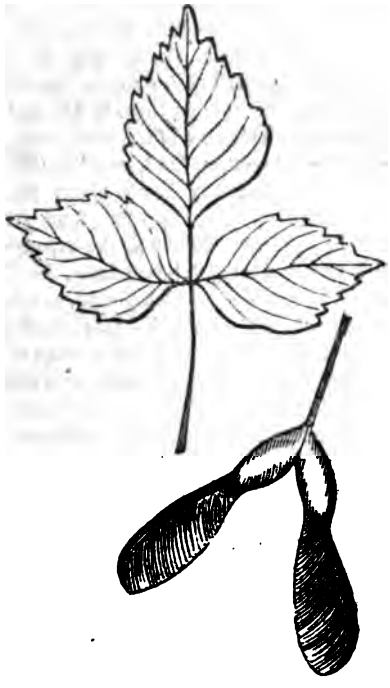

12. *NEGUNDO ACEROIDES*—BOX ELDER.

might perhaps be cultivated with profit, on account of its rapid and vigorous growth. Figure 12 shows a leaf which is compound, or primate, of one-fourth the natural size. Very often, and especially in specimens from further south, there are five leaflets, instead of three, as here represented. The fruit is shown of the size of life. The flowers appear in April or May; and the fruit ripens early in the season.

The species of the Maple Family found in the north-west but not yet observed in this state, are:—*Acer Pennsylvanicum*, Linn—the Striped Maple, so called on account of the dark stripes or lines on the bright green bark. The racemes of flowers are drooping, and loose. In other respects, this small and slender tree resembles the mountain maple. It is found in the vicinity of Lake Superior, and will undoubtedly be detected within our state, when the natural productions of the interior and northern counties come to be examined. This tree is often called moose-wood—the young branches being eaten (in winter especially,) by the moose. It would make a most beautiful ornament in any of our yards and gardens.

Acer dasycarpum, Ehrhart, the Silver Maple, which very much resembles the red maple in habit and growth, is found in Illinois, and doubtless extends along the Mississippi into Wisconsin, where it may be confounded with that species. It is distinguished from the other species of maple, by the flowers being on short pedicels, appearing before the leaves, the small number of stamens (3 to 6); the notches of the leaves are rather acute, deeply cut, and toothed; the leaves downy beneath when young, and of a bright silvery color; fruit large, divergent, of a greenish color, and woody in its young state,

The six species noticed above are all that are known in the northern United States. There are five other species west of the Rocky Mountains, and one in Louisiana.

While on this subject of the forest trees, I cannot help thinking what a fine thing it would be if those who have charge of public grounds or "squares" in our villages, and especially if the "corporations" of our several colleges would secure upon their grounds at least one good specimen of each tree and shrub that grows naturally in Wisconsin. Even the rows of trees along the streets of our towns and cities might be made to represent the ancient forest, now rapidly being defaced and swept away by the all-devouring axe. What lasting beauty and variety would thus be secured for those grounds and streets! A public square filled mostly with trees of any single species, is a beautiful object; but how much more beautiful and interesting it would be if it contained fifty different trees, and an under-growth of an hundred handsome and ornamental shrubs. Such places would at once give character to the locality, and attract to it people of taste and refinement. I will venture to predict that the university or college that shall first surround itself with such an "Arboretum" will first secure the patronage and good opinion of the people; and will thus outstrip those institutions that show a lack of taste and refinement, by omitting to plant trees.

SOMETHING OF A SHOAT.—Mr. Ebenezer Pardee, who lives about four miles south of this village, killed, on the first of January, a pig raised by him, that was born on the 12th of March and was therefore nine months and three weeks old, and its weight was found to be 362 3-4 pounds. Mr. P. is one of the oldest farmers hereabout, but has not become too old to fatten pork that it will trouble any of the younger farmers to match.

[Whitewater Gazette.

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For the Farmer.

TREE CULTURE.

MESSRS. EDITORS—There are three modes by which Trees and Forests may be propagated or increased in this region of country, viz. —by planting the seed—by sticking the cuttings or branches into the earth—by preserving and protecting the sprouts and young shoots which start up, indiginously in various places where the fire is kept off.

By the first mode nearly all kinds of trees and shrubs can be propagated, with more or less rapidity. By the second mode many kinds, (particularly soft wood on moist lands) of trees can be raised, such as Cotton wood, Poplar, some varieties of Elm, the Willow, and others. And by the latter, new forests in the place of old ones cut away, may be repeated from the former stumps.

The most profitable and available varieties of trees for general uses, which farmers can grow, undoubtedly are the *Yellow Locust*, *Butternut*, and *Black Walnut*, and in the order which they are here named.

From somewhat extended observation, together with some personal experience, it is safe to make the following statements in regard to this general subject:

Cultivating Locust.—In early spring, at the time of commencing the garden, plow and prepare rich ground well, as it should be for a root bed; for your locust nursery; put the seed into boiling hot water, and let it soak for at least twenty-four hours, in the same water, (though not re-heated,) then rub the seed in plaster, or guano, or old slaked lime, for the double purpose of drying it, and of causing it to sprout and grow more rapidly in the start. Sow it about as thick as beet or onion seed, in drills far enough apart to till with a broad hoe, and cover them from one to two inches deep, according to the lightness of the soil. If well tended, something like corn or cabbage, the young trees will grow from two to four feet high the first year. The next spring, early, prepare your field, of any desired size, by deep plowing and suitable manuring, as you would a corn field for a large yield; then mark it out in four feet squares each way—and at each corner (like corn four feet apart) carefully transplant two young trees from your locust nursery—and tend it well with hoe and cultivator, keeping down weeds and other obstructions.

Planted at the above distances, two in a place, an acre will contain over five thousand trees—a pretty dense little forest; and by the fifth spring from the nursery, if well tended and manured each summer, the trees will attain a size of from three to five inches in diameter. This acre of trees will cost, allowing for interest on land, seeding tilling, &c., for first year, not above about $8,00, and for each of the succeeding four years $5,00, in all making $28,00 as the expense of cultivating one acre of locust trees, for five years. At the end of that period, one half of them—one from each hill—may be cut out for any desired use—worth an average of at least eight cents each, for fencing or wood—yielding the nice little sum of two hundred dollars, and still leaving an equal amount of the crop on the ground, to be increased in growth and profit still more rapidly for the succeeding years, having more room and roots to start with.

And, in consequence of the wonderful propensity of the locust to throw out sprouts, when the sapling is cut down, the ground may be kept always and handsomely seeded, or stocked, with a rapidly growing forest; for if these young trees be cut down in winter or spring, the stumps will throw out several thrifty sprouts, two of which may be left to grow, and they will increase much more rapidly than the original stocks, as they already have considerable roots well grounded to sustain them. By this it may be seen that no crop which the farmer can put on a given amount of ground, for continuous growth, will yield as great return for the labor and outlay as a locust grove, if it is properly tended; though if left to grow wild and uncared for, they will grow up scrubby and unprofitable—useless. Besides, on field-lines and road-sides, the young trees may be early set out at suitable distances—say six or seven feet apart—for fence posts when present fences have failed, and after five or six years' growth, they may be cut off as high above the ground as the fence should be—and still they will live, grow and strengthen, while the part cut down will make handsome, durable rails or stakes.

Another item which has not often been taken into account in estimating the value of locust trees, is the *bark*, which furnishes one of the finest and strongest texile fibers of any

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known tree; besides being valuable for *cordage*, on account of its strength and pliability, it is a beautiful article for being made into fine and printing *paper*. Let the tree be cut in the spring, when the bark will strip off, (which is also a benefit to the timber,) and it will make very close and strong ropes, as I have seen; and it is worthy the attention of ingenious mechanics to contrive cheap and handy machinery for its manufacture into different fabrics, as there is little doubt but that in a very short time a field of the locust will be as generally cultivated on all the prairie farms as is the corn field. A few pounds of locust seed properly planted and tended, will prove a little mine of wealth and beauty to every prairie farmer who will be rational enough to cultivate it—besides securing the blessing and gratitude of his progeny. Locust is a hard, tight, durable timber.

Young *Butternut* and *Blackwalnut* trees are also rapid growers, though somewhat less so than the locust; and they also have considerable propensity to sprout and continue their growth, when cut in the spring; and, as is generally known, the timber is durable, and valuable for fencing and many other purposes—and may be grown with little more expense than the locust—in fact, the only additional cost being for the first seeding of the ground. For these as well as other trees, the best mode of enriching the ground, to keep up thrifty growth, is to mix a large amount of swamp or "Slue" *muck* with a little well rotted barn-yard manure and leached ashes or old lime—throwing a few shovels full every fall about each hill—to an extent not exceeding what is necessary for a thrifty yield of corn or wheat. The best time and mode of planting these nuts, in the nursery, is the latter part of autumn, putting them about an inch under the surface of the ground, where they may freeze, and be cracked, so that the little sprout may spring out; but a serious objection to this is, that they are liable to be found and destroyed by mice, moles, or other vermin; to prevent this, I have known them to be planted or stuck into the soft ground during a slight thaw in late winter or early spring, when there will yet be some freezing weather, enough to crack them and bring forth the young tree; and it is well to cover them lightly with old forest leaves or straw, during this first season of their sprouting in the nursery. They may be planted two or three inches apart, in drills wide apart enough to work with a broad hoe; and under this treatment, I have known the young trees to grow to a hight of two to three feet, and the thickness of a whip-stock, during the first year—and may remain another year in the nursery. After this they may be transplanted into the field, in a similar mode to that suggested for the locust, where they will grow nearly as fast if well dressed out.

And where a forest has been cut down, in the winter or spring, it is known that the stumps throw out numerous thrifty sprouts, two or three of which at each stump may be nicely trimmed up and left to grow, and if all other bushes and briars are cut away, and the fires kept out, they will increase in size very rapidly, as they already have plenty of air and large well grounded roots to nourish and sustain them. Several such groves in Illinois are known to the writer where the young shoots have grown to the size of a large walking cane during the first season, and at the end of five or six years, have attained the size of three to five inches in diameter, and twelve to fifteen feet high—in fact, a size large enough to be useful for many purposes. But if the saplings are cut down at a later period in the season than the forepart of June, they are not likely to throw out any new sprouts, but soon die.

In this manner very beautiful and useful groves of several kinds of oak, hickory, elm, ash, and other varieties of trees, can be propagated with no preparation of the soil, more than a little time spent in keeping away obstructions and plants which would exhaust the soil; while cattle must be kept out and not allowed to pasture among them, for several years while the young trees are small and tender.

Then, no doubt most of us have observed in very many localities throughout the prairie district, where the fires have been kept out for several years, and the ground unbroken by the plow, that several varieties of young oak and hickory trees have made their appearance, starting forth with a thrifty growth, and frequently accompanied with occasional elm, white-ash, basswood, thorn and crab-apple trees. This is found to be the fact in most portions of the prairie re-

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gions—as we have all noticed, to a greater or less extent; so that it really is not a very laborious or difficult task to supply the timberless sections with all needful groves and wood, for fuel and fencing; it is only a matter of moderate care and time—if we will but exercise a little reasonable patience and exertion—which the benefits in quick coming years will richly compensate for—in both profit and pleasure.

It may be safely said, that the miserable bane to the wise improvement and fullest prosperity of this bountiful country in past time has been the eager and avaricious passion for sudden and unearned wealth—which in its haste for present and gloated acquisition, has overlooked or disregarded many of the richer comforts, and the permanent enjoyments and advantages of the operators; a spirit has woefully prevailed much akin to that which actuated former silly ones to "kill the goose which layed the golden egg," that they might gloat on instant treasure—or the Vandals, who were traveling through a new country where they found various rich fruit trees, and in order to monopolize the whole of the rich product at once, cut down the trees and laid them waste, thereby cutting off all future supply.

Now, neither of these acts savor any worse of destruction and folly and lack of common prudence, than is displayed by those who waste the timber where it is sparse in growth while they also neglect to provide for the growth of a new supply; a judgment in which, we have no doubt, all judicious persons who look about this country will acquiesce. The present high prices of wood, the difficulty of obtaining a supply, the many and increasing devouring demands, together with the *present* inadequate efforts to increase a corresponding supply of timber and wood, has become a subject of grave and alarming moment, which calls loudly for the earnest thought and action of all the well wishers of our country; and we may safely say, no one subject is more worthy than this of the attention and encouragement of our Agricultural Societies—and it should command the highest premium among their prizes offered for the best crops. Let us earnestly hope and confidently believe that a wiser policy will soon be practiced, and a bett[illegible] of results speedily exist. D.S.C.

A SUGGESTION ABOUT COLOR.

Having got safely through the tribulations which attend the building of a dwelling, what perplexing doubt and hesitation preceeds the choice of an appropriate color for the same! What consultations are now held with the ladies of the household!—how those friends of the family, supposed to have a correct taste in such a matter, are bored for their opinions! With what anxious and bewildering uncertainty are the stranger combinations presented by the painter regarded—and what inevitable disappointment waits upon the result! The selection of just the right color for a dwelling house, is indeed a matter of no small consequence, and he is to be regarded a fortunate man, who obtains one that suits his entire approbation. For a site among the trees in the country, we confess to a weakness for "white with green blinds." We are wrong here, doubtless, for "the books" all condemn white as "unharmonious," and all that. Although we regard it with a certain bashful favor, we do not esteem it as the *best* color, and should rather choose one that would harmonize better with surrounding objects, of all colors. For this purpose, commend us to the Autumn and Winter tints on the leaves of the White Oak.

MILWAUKEE, Jan. 15, '56 C. G.

THE WYANDOTTE CORN.

Some time ago we penned a brief caution in regard to this large new humbug; but it would appear that something more ought to be said on the subject.

"The Wyandotte," or South-Western Squaw Corn, is one of those varieties of *soft* white corn in much favor with the Indians for home consumption, as it is easily made ready for use without the aid of a mill. Indeed, it is more than probable that it can not be kept long, if reduced to meal; and it is equally certain that it will not do for shipping, *in any form*, being almost, if not quite, destitute of the *oil* so necessary to its preservation in bulk. There can be no doubt, however, that as far south as Morgan county, in this State, the variety will ripen reasonably well, though probably not much if any, north of there. But *when ripened*, it is fit only for distilling, or for starch; it can not be kept in bulk, and is too tasteless for bread; though for making whiskey it may prove valuable, and yet we doubt even that, and warn our readers against planting it, except as an experiment. [Prairie Farmer.

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For the Farmer.

DOMESTIC VEGETABLES AND THEIR ORIGIN.

The history of many of our cultivated vegetables is fraught with peculiarities which may not be wholly uninteresting to our agricultural friends, and we have attempted to present them here with a few facts concerning the more domestic class, and such as from their use may be styled *culinary plants.*

Among garden vegetables, the *Cabbage* is highly esteemed, and much cultivated; but, like lettuce, its real value as food is much less than the general estimate. Much, however, depends upon the method of preparing it for the table. All its nutriment may be boiled away, or it may be eaten in its crude state, as it frequently is, with vinegar, etc., and its nutrition is then as little known. It should be boiled in soft water until it is thoroughly cooked—not distilled—and then with condiments it may be presented to the palate. Cabbage may be found growing wild on the cliffs in various parts of the south coast of England, a very small plant of scanty leaves, called by the inhabitants *sea-colewort.* No one would suspect that it was the parent of the numerous tribe now known as cabbages; for, while the original plant does not weigh an ounce, its progeny sometimes grow to the weight of from twenty to thirty pounds. *Sea-colewort* is salt in its flavor, and not very tender, while the productions from it, by the cultivation of many centuries, are sweet, tender and wholesome. It was well known to the ancient Romans, and was with them a choice article of food, long before the present æra. Cultivation has run it into many varieties, and each of these can be materially changed by the new soil of the west. Few plants partake more of the atmosphere they breathe. The *Cauliflower* and *Broccoli* are of the cabbage tribe, but require a richer soil and greater care than the common cabbage.

Lettuce is also a plant which has been produced from an inferior weed. As a weed, it is strongly scented and so bitter as to be entirely uneatable. Even the cultivated lettuce, of which there are several varieties, if fully exposed to the sun, soon becomes strongly bitter. It possesses to a considerable extent the properties of opium, and is said to induce sleep and soothe the nerves without the evil effects of that filthy drug. Lettuce is a native of the isles of the Grecian Archipelago.

The *Tomato*, now so much used and so highly prized for soups and sauces, is a native of South America, where it was found and named by the Portuguese colonists. For a long time it was cultivated in gardens, as a rarity, and no use was made of it whatsoever. It was called *love-apple*, from its peculiar beauty of appearance; but considered disagreeable in flavor, and very unwholesome. Since its use has become known, it is very generally esteemed. It contains a very agreeable acid, and some of the qualities of calomel. As a plant, it is easily affected by cold weather and frost, but its vines grow rankly in rich soil, and, where they do not grow at the expense of the fruit, as is sometimes the case, there are but few plants of its size that yield more abundantly.

The *Egg-plant* is allied to the tomato, and is similarly used. It possesses less flavor, but the fruit grows to a much greater size. Great care is required for its cultivation in this climate; but we have seen some rare specimens produced in this section, during the past season.

Of the *Beet* root there are now many varieties. It is a native of Southern Europe, and is found growing wild upon the coast of the Mediterranean Sea. It is cooked and eaten in a multitude of ways, and possesses a considerable amount of saccharine matter. In France, sugar is manufactured from some of its peculiarly sweet varieties. Some kinds of the beet plant do not form an eatable root, but are cultivated for their tender leaves, which are boiled and eaten as pottage. Beets have been raised on our prairies to the weight of twenty-two pounds.

Turnips grow wild in England and Hanover, but they are there, in their primitive state, small, worthless, and almost rootless weeds, contrasting wonderfully with their kindred in the fields of culture. This root is also raised to the weight of several pounds, and is much employed as food for milch cows, by the dairymen whose profit lies not so much in the quality, as in the quantity of milk it is known to produce.

The *Carrot* was probably brought first from Spain, where, as in England for a long time, ladies used its beautiful green leaves for head-dresses, while its use for food remained unknown. We admire the simplicity and natural taste of these ancient ladies,

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and wish most heartily that they had handed down to modern belles and dames a little of their rural pride, to contrast with ungainly ribbons, laces, and brocades; but since their day another use has been found for this life-giving root, and pride is no longer a rustic pet, but a dictatorial Nero. This root is probably capable of yielding more to a given quantity of land than any other now cultivated. As a food for cattle, it has no superior. There are several varieties.

Cultivation has not done as much for the *Parsnip* as for the carrot, but they both delight in the rich soil of this region. Parsnips are found to partake much of the soil in which they are grown—having a more rank taste as the soil is richer—and they sometimes possess all the nutritive qualities of the potato. They will sometimes grow to the dimensions of four feet in length and three or four inches in diameter.

The *Potato* when first found, in the state of Virginia, was much inferior to the uncultivated Jerusalem artichoke, and was cultivated many years, in England, Ireland, and this country, before its alimentary value was acknowledged. It was first taken to Ireland by Sir Walter Raleigh. Cultivation has produced and is still producing countless varieties of this root, which now ranks next in importance to corn as vegetable food. When first found, it was small in size and of no agreeable taste, but cultivation has so enhanced its value that in some countries it supercedes wheaten bread, and becomes itself the "staff of life." The native place of the potato was for a long time in dispute; but it has lately been found growing wild in the South American States, Chili and Peru. Potatoes have been raised on our prairies in such perfection as that a single root would weigh from five to nine pounds. The potato possesses about seventeen parts (in every hundred parts) of pure starch.

The *Artichoke* is a native of Europe and Asia, and also of both North and South America—being found growing wild in Palestine, Greece, Brazil and the United States. It is a maritime plant, and grows best among sea weeds, or in very moist soil. There are several varieties of the artichoke, some of which very nearly resemble the sunflower.

The *Radish* is a native of Eastern Asia, and was first cultivated by the Chinese. It contains a very little stimulant, but no particular nutriment, as it is mostly composed of water, woody fibre and acrid matter. Its varieties differ in shape and color, but are much the same in substance. Its growth is very rapid in warm and moist soils.

The *Onion* is a very ancient plant, it having been known to the Egyptians two thousand years before the Christian æra. The ancient Egyptians worshipped it as one of their gods. Its flavor varies with the climate and soil—becoming milder as the soil is rich or the climate warm. It contains much nutritive mucilage, and is very useful for its soothing and healing properties. When analyzed, it is found to contain water, sulphur, phosphoric and acetic acids, some vegeto-animal matter, and a little manna. When its acrimony has been extracted by vinegar, it possesses a very agreeable, sweet, and delicate flavor. The onion grows in many different forms—sometimes multiplying by numerous bulbs beneath one blade, like the potato, and again forming bulbs, with the same essential appearance and properties, at the top of the blade. By planting it in soil perfectly adapted to its proper culture, the onion may be changed from a mere condiment to a nutritious food. But it is now considered a vulgar plant by many of "*the elite*," whose affectation might use it for the production of tears, but that its breath "is *so* offensive." A. J. M.

Grain Crop in Illinois.—The Chicago Press says: Upon the subject of the crop of 1855, we are in possession of direct information from some of the most intelligent men of the state, and from nearly every county in it, on which we venture the following estimate:

Indian Corn, bushels, - - -	180,000,000
Wheat, " - - - -	20,000,000
Oats, Barley and Rye, - - -	50,000,000
Total, - - - - - -	250,000,000

The estimate is believed to be under, rather than over, the actual result.

Doubtful! we think. [Eds. Farmer.

Education is not a matter of a day, or a week, or a year—but of a *whole life*. Commenced in the cradle it only ends in the grave—nor even then—for the soul of man must continue, throughout the endless ages of eternity, to drink deeper, and still deeper, of the mysteries of the universe, and to wonder and admire still more, as it beholds the wisdom of its Divine Architect.

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For the Farmer.

GEOLOGY—APPLIED TO AGRICULTURE.

MESSRS. EDITORS—Unfortunately for the agricultural interests of the state, the public thus far are wholly in the dark as to the chemical composition of its soils. No effort, even has been made to procure their analysis. The act providing for a Geological Survey, may have contemplated something of the kind, but the means to accomplish it were carefully withheld. The State Geologist is required to traverse all parts of Wisconsin, to examine its several deposits of rock, minerals, &c., and collect specimens of each, and to make a report shewing the order and position of the same. He is also to employ a practical chemist to accompany him, and make the necessary analysis of the several materials found. For this purpose a total of $2,500 per annum is provided. When it is considered that the Geologist has to travel continually for months together, to hire his own conveyance, to employ assistants, to traverse woods and marshes, to sleep under a tree, or in the open prairie, as night may overtake him, and to incur all expense from this meagre sum, it will be seen how slim the chance is for any adequate investigation of the agricultural capacities of our soils, by chemical process. What is wanted is a practical chemist, adequately remunerated by the State, centrally located, to whom farmers may transmit samples of soils for analysis, free of charge. By this means, and this alone, will the public become familiar with this subject. The recent appointments in the University lead to the hope that some thing of the kind will be undertaken. A small annual appropriation to meet the expense, would undoubtedly secure this immense aid to our agricultural classes.

Analysis has been made of a few of our rock formations. They throw but little light however, upon the absolute qualities of the soil, and are applicable only to the southern portion of the State. The following shows the composition of the Lead bearing or "Upper Magnesian" Rock. Also the "Lower Magnesian," which is our most extensive surface rock in this section.

LEAD BEARING OR UPPER MAGNESIAN ROCK.

Carbonate of Lime	47.96
Do. Magnesia	43.00
Oxide of Iron	2.00
Silex	3.70
Water	2.00
Carbonate of Soda	70
Loss	64
	160.00

The Composition of the Lower Deposite differs from this but slightly, as an inspection of the following will show:

Carbonate of Lime	54.00
Do. Magnesia	44.00
Silex	1.80
Alumina, with trace of Iron	1.50
Loss	2.30
	100.00

Our "Blue Limestone" is doubtless a very pure carbonate, as it is composed mainly of fossil shells. Our Upper Sandstone is strongly impregnated with iron; our Lower Sandstone is nearly a pure Silex. An inspection of the scientific reports upon the rocks of the primary formation about Lake Superior, especially that class having an Alkaline base, all represented here by the drift, does not give ground for belief that our soils contain a sufficiency of soda, potash, &c., for a permanent supply of those fertilizers. They seem to settle the question, that there is a positive deficiency. Let any one compare an analysis of the wood of any variety of fruit tree, or of the stalks of our grain crops, with the results above given, or any analysis of soil even, if such have been made, and the capacities of the soil to meet the demands upon it by their growth, will be particularly striking. Wood ashes it is apparent, are to be ranked among the most important and necessary manures for future crops, as also soda, in one form or another, and the phosphates. Let any one compare the growth of a fruit tree or a row of corn, to which ashes have been applied, with that of others to which they have not been, and the result will surprise them beyond a peradventure.

Upon all the chemical qualities of Wisconsin soils, we need light—the light of scientific investigation. Are we to have it, or will our rulers, as usual, let the agricultural interest grope on, while beggarly politicians absorb the whole public revenues, to their exclusion from all direct and immediate benefits therein? On no subject have the farmers in our state legislature been so remiss in duty—so small in conception as in what related to, and would benefit themselves.

I am aware that this article is a ramble from the original purpose, but haste must excuse much, and the subject is larger than the room allotted to it. Yours,

H. A. T.

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AGRICULTURAL SOCIETIES.

Gentlemen Farmers of Wisconsin, and industrious Lady Housewives, are you all planning to get up something nice, for exhibition at the State and County Fairs next fall; or do you purpose to go simply to see, and criticise what others show—perhaps to find fault with, and sneer at it—not yet having realized perhaps, that it is always a great deal easier to find fault than to do better. To all such, and to all others, we would say, not even excepting that class (a few of whom may be found in every community, who are so good that they are good for nothing) Lay aside your predjudices, whims, laziness, pride, conceit, or what not, and conclude to do something for your county and state, that is not purely and individually selfish. Make sure at least of one tear of regret at your funeral, because a good and useful man or woman has passed away. The Programme and Premium List of the State Agricultural Society for the next fall's fair will soon be spread before you. It will be attractive and ample, and if the weather is faverable, and we mean to have it so, it is hoped and expected to eventuate in a much finer display and larger attendance than has ever yet been seen together on any occasion on Wisconsin soil. We wish to settle the point, whether Illinois with less than twice our population is able to rally five times as many at her fairs as Wisconsin. If so, then we wish to find out the cause, and if practicable remove it. We repeat, Farmers, be making up your plans for the fair, and concluding what you will exhibit. We will probably publish the premium list, and place of holding the fair in the April number of the FARMER. Meantime we would advise all expecting to want tickets at the fair, to read the advertisements of the society, on the last page of the cover, and send in their orders early for membership before the seeds and volumes of transactions are all bespoke.

COLORED DAGUERREOTYPES.—It is stated in the Saugerties (N. Y.) Telegraph that the Rev. L. L. Hill, of that place, has at length perfected his discovery for fixing the colors of the daguerreotype, and that he has been offered $30,000 for his right in it. He values it, however, at ten times that amount, and not too highly, if he has actually succedeed in so great an achievement of science.

For the Farmer.

THE LOCUST.

MESSRS. EDITORS—Your article in the January FARMER on "Timber Growing" needs a caution, or disappointment may ensue. It is true the locust in variety is at home in the west and will grow well with ordinary culture. It is equally true that the "black locust" which is most common here, is of but little value as timber; lasting in exposed situations but a few years, while the yellow will endure a long time. For rails, fence posts, mill works, building timber, rail-road ties, and indeed any purpose requiring strength and durability—the yellow locust is vastly superior. Procure only the seed or plants of the yellow variety. The seeds are enveloped in a hard shell, and to induce prompt germination it is necessary to cover with scalding water—soak over night, and sow in drills covering about half-inch deep, at one or two years old, transplant in dry light soil, 4ft. 6in. or 8ft. apart each way. Cultivate for a few years, when you will have a grove of great beauty and value. There is an increasing demand in our eastern ship building towns, for yellow locust timber —at 50 cents per cubic foot—the usual price there I apprehend will afford a greater net profit than any other purpose to which land can be used.

A. G. HANFORD,
Waukesha, Wis.

QUALITY OF AMERICAN WOOL.

The statement has been propagated far and wide that American wool is unfit to give that beautiful finish required for broadcloth of the best quality. It has been stated that our wools were longer in the staple than the foreign kinds, and were excellent for making strong warps, but did not possess the necessary felting property requisite for fine cloth, and for this reason a little foreign wool was necessary. H. C. Merriam, in a late number of the Country Gentleman, scatters all such assertions to the winds, and proves conclusively that American wool surpasses all foreign wools for its *felting* properties, and for making beautiful broadcloth—light or heavy. He states that American grown wool and fine wool from Saxony have been tested, and the palm awarded to the former. The finest Saxony wool obtained from Hungary contained only 2,400 serrations to the inch, while wool obtained from samples of American flocks contained 2,552 serrations to the inch. [Scientific American.

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AGRICULTURAL CLUBS.

We would commend the following article to the attention of every community that would be posted up and progressing with the speed of the times. How can the people of a rural neighborhood spend one evening a week so well, during the winter season, as by meeting thus together, and comparing ideas on the numerous and all important subjects which relate to their vocation? Such meetings, conducted in a proper spirit, cannot fail to be of great value, as well as highly interesting, to all who take a part in them; and, eventually, of important service to the public. We would urgently recommend every neighborhood to follow the suggestions here thrown out by our friend Dow who, by the way, is a practical man and a good farmer—and let those who have agricultural books, and papers, take them along for text books and references. Let this course be pursued for the next five years, in every neighborhood of the west, and its effect will be to add millions to the value of the products of the soil; and greatly to the light and knowledge of the people. We hope our friends will always inquire at their meetings whether the FARMER is extensively taken as as it should be—and if not, take prompt and effectual steps to remedy all such sins of omission, as we mean to make, and keep it, the best agricultural paper in the west, and always worth at least ten times as much to every subscriber as it costs him.—EDS.

UNION AGRICULTURAL CLUB.

MESSRS. EDITORS—Such is the title of a small band of brother-farmers who, believing in improvement and progression in agricultural pursuits, and hoping to be benefitted thereby, met at the school-house, in district No. 2, Palmyra and Eagle, Jan. 3d, for the purpose of organizing themselves into a farmer's club, the object of which was the exchange of opinions, and finally, advancement in agricultural knowledge. The *few* organized themselves into a club, by electing the proper officers, &c. A committee was appointed to draft a few rules by which this society might be governed, and necessary arrangements made for weekly evening meetings. The next business was the selection of a subject for the next exening's consideration. It was also determined that the president of each succeeding meeting should deliver an essay upon the subject named for that evening's topic of conversation—thereby throwing out any suggestions which might be made subjects of a general exchange of opinion. Our first one being agreed upon, the meeting adjourned to meet one week from that time. The next meeting was well attended considering circumstances. The subject was, "The most expedient and economical method of clearing opening land, and disposing of the timber in this vicinity." Every thing went off harmoniously, and it was a late hour before we thought of time. After having spent the evening merrily and as we trust usefully, we determined to have "Plowing" as our next subject, and adjourned —going to our homes quite refreshed, and prepared for joyous dreams. Our last meeting, or the 3d, seemed to speak encouragement to the perseverence of all present, and although the subject of plowing was not entirely exhausted, I think all felt somewhat benefitted by the mutual interchange of opinion.

Such a meeting seems like a school—it is a school in which we may advance in our social, intellectual, and especially our agricultural education. It seems to me that every town and school district, while benefitting themselves particularly, might advance the great cause of agriculture, by forming agricultural societies peculiar to themselves. We at least intend to give the thing a fair trial, and take the benefit of the great privilege which we have of conversation and exchange of ideas, and hereby be benefitted—not forgetting to assemble ourselves together in the name of Agriculture.

The FARMER is generally taken in this neighborhood, and meets with a high approval. The style in which it is gotten up, the amount of good reading matter which it contains, and the good time in which the last number reached our post-office, seem to give universal satisfactian. O. P. D.

PALMYRA, Jan. 21, '56.

HORSE SHOW.—There is to be a grand Horse Show at Louisville, Kentucky, next spring, under the auspices of the South Western Agricultural and Mechanical Association. The exhibition to commence on Tuesday, May 13, 1856, and will continue three days.

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For the Farmer.

WASHINGTON CO. AGRICULTURAL SOCIETY.

HARTFORD, Feb. 21, 1856.

MESSRS. EDITORS—I enclose herewith a list of the officers of the Washington Co. Agricultural Society, organized at this place in November last, which, if agreeable, you can give a place in your journal.

Very Respectfully,
GEO. C. WILLIAMS.

At the Annual Meeting of the Washington County Agricultural Society, held at the village of Hartford, on the first of November, 1855, the following officers were elected for the ensuing year, viz:

President,—HOPEWELL COXE, of Hartford.

Vice-President—JOHN KESSEL, of Richfield.

Treasurer—WILLIAM ROHN, of Jackson.

Recording Sec.—GEORGE C. WILLIAMS, of Hartford.

Corresponding Sec.—PATRICK TOLAND, of Erin.

Committee of Arrangements—PHILLIP DHEIN, of Germantown; THOMAS HAYS, of Richfield; and D. W. MAXON, of Polk.

The next Annual Meeting to be held at the Court House, in the village of West Bend, on the first Monday of November, A.D., 1856.

MILK PAINT.

A paint has been used on the continent of Europe, with success, made from milk and lime, that dries quicker than paint, and has no smell. It is thus made: Take fresh curds, and bruise the lumps on a grinding stone, or in an earthen pan or mortar, to make it just thick enough to be kneaded. Stir this mixture without adding more water, and a white colored fluid will soon be obtained, which will serve as a paint. It may be laid on with a brush with as much ease as varnish, and it dries very speedily. It must however, be used the same day it is made, for if kept till next day it will be too thick; consequently no more must be made at one time than can be laid on in a day. Any color, red or yellow ochre, may be mixed with it in any proportion. Prussian blue is changed by the lime. Two coats of this paint are sufficient, and when dry, it may be polished with a piece of woolen cloth, or similar substance, and it will become bright as varnish. It is only for inside work, but it will last very long if varnished over with the white of an egg after it has been polished. [Me. Farmer.

MATRIMONIAL CLUB OF ALABAMA—THE WAYS OF THE SOUTH.

TUSCALOOSA, ALABAMA.

MR. EDITOR—I beg leave to call your attention to the following advertisement which I clip from the "Tuscaloosa Monitor." Marriage has generally been considered a lottery, and this communication, if it has none other, certainly possesses the merit of presenting to the public a "grand scheme" for matrimony. The society, from what I can learn, was formed in good faith; for the rest, the advertisement must speak for itself.

Yours, &c., A BRICK.

MATRIMONIAL CLUB.

Certain gentlemen, fourteen in number, despairing of getting wives by any ordinary means, and weary of the vexations, doubts, and anxieties of courtship, have formed an organization for the purpose of marrying themselves off without any difficulty. The business of the club will be conducted as follows:—

Any lady who is desirous of marrying, and willing to take a husband from the club, is requested to make known the fact by letter, and upon its reception her merits will undergo an examination, whereupon the club will determine by ballot whether or not she may be accepted. A vote of two thirds will be required to carry the affirmative, and without the vote her application will be rejected. If accepted, however, the club will proceed to draw lots, and he upon whom the lot falls is bound to marry the lady or pay a heavy fine to the club, and subject himself to the chances of a suit, and each member is so bound by obligatory writings, that his refusal to take her will be in law a breach of promise, for which damages can be recovered in any of the courts of the country.

The advantage of this Matrimonial Lottery to the ladies is unquestionable. All the members of the club are educated gentlemen of unblemished reputation, and of good standing in society. The majority of them are considered handsome men, and in fact there is only one of them who is downright ugly and uninteresting, and he has some recommendations of a sterling nature. All of them are sober industrious men, and some of them are not only good looking, but intellectual, and amiable. It is plain, then, that no lady whose offer is favorably riceived by the club can draw a blank entirely, whereas there are in the club four capital prizes—one more than a hundred thousand; two over fifty thousand, and one of forty thousand dollars; nor, don't be alarmed ladies, is either of these prizes centered in the aforesaid ugly individual. Now, every accepted lady will have four chances in fourteen of winning one of these prizes. The subjoined scheme is accurate in the main:—

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Prize No. 1.—$100,000. Plantation and negroes in possession.

Prize No. 2.—$50,000. Plantation and negroes in possession.

Prize No. 3.—$50,000. Plantation and negroes in possession.

Prize No. 4.—$40,000. Partin possession, part in expectancy.

Prize No. 5.—$10,000. All in expectancy and a long time off.

Prize No. 6.—One negro, a mule, and a forty acre tract of land.

Prizes Nos. 7, 8, 9, and 10.—An unknown quantity invested in merchandize.

Prize No. 11.—A briefless lawyer who never had a case.

Prize No. 12.—Briefly, a lawyer who never will have a case.

Prize No. 13.—A poor gentleman of a literary turn.

Prize No. 14.—A professed poet—the aforesaid ugly—penniless.

Note the following instructions. Any lady who chooses to make an offer, will please direct her letter as follows:—

"Matrimonial club, care of Editor of 'The Monitor,' Tuscaloosa."

The lady may write over a fictitious signature if she chooses with the understanding that if accepted, her real name must be disclosed immediately; after which the real names of the members of the club will be transmitted to her, but she will not know the name or description of the member who has fallen to her lot until he appears with his license and his parson ready far the ceremony. This rule is necessary, lest any lady failing to draw a capital may, in her disappointment, decline to fulfil he engagement.

Every correspondent must give her post office and address, genuine or fictitious, in order that the secretary of the club may direct all answers properly.

In her communication to the club, the lady must in good faith give an accurate account of herself—her personal appearance, her character and disposition, the manner of her raising, the characteristics of her parents, the educational advantages she has enjoyed, and her age, must all be carefully given. Any attempt at deception will of course, if discovered, put a stop at once to all proceedings, and in order to guard against fraud the club will, so soon as any lady is accepted, despatch a confidential and secret agent to her vicinity to ascertain the genuineness of her statements, and in case of suspicion, to report back to the club for further action.

It may be remarked in conclusion in regard to the members of the club, that all are over twenty-three and under thirty-five years of age.

Those interested will please apply early, as all the chances will be taken in a very short time, whereupon all the weddings will take place simultaneously.

Published by order of the Club.

TUSCALOOSA, Jan. 1856.

[N. Y. Spirit of the Times.

AGRICULTURAL COLLEGE IN NEW YORK.

Gov. Clark, of New York, in his message to the Legislature, refers to the Agricultural College organized in that state in 1853, and now a petitioner for a grant of $40,000 from the state. This institution is located in Ovid, Seneca county. Of the sum necessary to commence operations, $30,000 have been subscribed in the county, and it is expected $10,000 will be added from the same county; and now the trustees have applied to the state for a grant of $40,000. But even this sum will not be deemed a sufficient endowment. At least $200,000, it is thought, will be necessary.

The plan of this college, according to the Journal of Commerce, is of a very extended and comprehensive character. It includes a farm of 300 acres, and a course of instruction which shall embrace agriculture, chemistry, mathematics and mechanics, surveying and engineering, geology and botany, and the practical application of the knowledge derived from these studies, in the management of the farm, the dairy, and the various kinds of live stock. The extensive farm which has been secured will furnish fine opportunities for experimenting on stock. Specimens of all the best breeds in the world are to be procured, and their peculiarities developed and their value determined. The importance of this to the state will appear from the statements of the Journal of Commerce, that it is computed that $6,000,000 of the property of the state consists of live stock, of which a portion amounting to two per cent. is lost every year by disease; and it is said that there is not in the whole country a thoroughly educated veterinary surgeon. The Journal adds:

"Incident to this purpose, experiments in the various kinds of grasses will be prosecuted, till their qualities are thoroughly tested, and it shall be ascertained which can be cultivated with the greatest return to the farmer. Like experiments will be conducted in respect to the different kinds of grain, to ascertain which are best adapted to the climate of the north. The ravages of insects have been so great, at certain seasons, and in some sections of the country, that it is estimated that ten millions worth of property was destroyed in that way in the year 1854 alone, in the state of New York.

It is ascertained by a series of observations, not only that some descriptions of grain are less liable than others to injury from this source; but that certain seasons,

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which exhibit timely indications of their peculiar character, are more likely than others to produce these insects and encourage their destructiveness. This fact renders a knowledge of meteorology of peculiar service to the agriculturist, not less than the consideration of mildew and rust, which every one knows are also very destructive at times, when not averted by the adoption of proper precautions." [Boston Journal.

SINGULAR SAGACITY OF A HEN.

EDITORS COUNTRY GENTLEMAN—A case of animal instinct came under my observation, of so singular a nature, that I am inclined to give it publicity.

A few years since I purchased a hen of Mr. Odell, (now a resident of our village,) who informed me that she was one of the first settlers of Wisconsin, and having a particular regard for old age, I concluded to keep Mrs. Biddy, and witness the effect of age in her declining years.

Whether there is a natural respect for age among certain animals, I will not attempt to decide, but certain it is, that not a biped upon the farm ever attempted to cross her inclination, or dispute her authority; and if there was a fowl whose organ of self-esteem was prominently developed, it was her.

Nothing remarkable occurred aside from her haughty deportment, until the last of her life, which was in 1851; when she became extremely decrepid, and was unable to walk but a few steps without stopping to rest, and if by any mishap she was thrown upon her side, she was unable to regain her feet until some one came to her assistance. Decrepid as she was, however, she laid a litter of eggs, and commenced the process of incubation. Her health failing rapidly, it soon became evident that she could not survive long enough to finish her task.

One morning I observed her leaving her nest, and directing her course towards the place where she received her daily food. She proceeded a little distance when she came in company with another hen who was walking leisurely through the yard. Both stopped, and putting their heads together as if in close confidential conversation, remained so for some minutes. After the conversation was ended, the old hen began to retrace her steps back to her nest, followed by her younger and more vigorous companion, stopping occasionally to renew the conversation. Having arrived at the nest, a long conversation apparently ensued, after which the young hen, carefully placing herself upon the nest, took charge of the eggs as if they had been her own, while the old hen, as if conscious of her inability to proceed with her task, had provided a mother for her expected offspring, and bidding a final adieu to the place where the ties of nature had bound her affection, she left the scene. She never afterwards took any notice of her nest, or exhibited any regard for her eggs.

She appeared conscious of her approaching end, and taking her station near where she received her food, she never left the spot but remained there a few days, and expired.

The stepmother reared the chicks, with all the attention and affection of an own mother. PHILANDER PIERCE, Marquette, Wis., in the Country Gentleman.

MINERAL WEALTH OF LAKE SUPERIOR REGIONS.

The mining business has been very prosperous during the past season; and up to the close of the navigation, the total product for the year was 4,855 1-2 tons. The value of the copper at the wharves was $140 per ton, making the money value $679,770. The increase of this year's shipments over last was 1800 tons, and it is estimated that those of the ensuing year over the present one will be about double. The Lake Superior copper contains silver, some having produced as much as 3 3-4 pounds to the ton. Of the copper shipped from Lake Superior, 1600 tons go to Pittsburg, 2000 tons to Detroit, and the remainder to Cleveland and Boston. The Minnesota Mining Company sold a considerable portion of last year's copper to Rothschild's house. It was smelted in Paris, and found to contain, besides the usual alloy of silver, a trace of gold.

[Scientific American.

BRITISH PORCELAIN.—At a recent meeting of the Burslem School of Design, in Staffordshire, England, H. Minton made a speech, in which he stated that in the manufacture of china and earthenware England surpassed France, but great efforts were required to maintain their present position. It is a singular fact that the British porcelain manufacture may be said to be the product of one ingenious working man, and he lame and enfeebled—the well known "Wedgewood," who, from a journeyman potter, elevated the porcelain manufactures of England from a rude to a most elegant art, was elected a member of the Royal Society, and died wealthy and in the esteem of his countrymen.

FROZEN FLESH.—Mr. A. Bronson, of Meadville, Pa., says, from fifteen years' experience, he finds that Indian meal poultice, covered with young Hyson tea, softened with hot water, and laid over burns or frozen flesh, as hot as can be borne, will relieve the pain in five minutes. If blisters have not arisen before, they will not after it is put on, and that one poultice is generally sufficient to effect a cure.

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For the Farmer.

VENTILATION.

MESSRS. EDITORS—It affords me pleasure to comply with your request to furnish you with a few "plain practical views on ventilation," and you are welcome to any aid I may be enabled to afford you in the future, to disseminate useful information. The term ventilation has been misapplied. It is used to describe draughts of air through rooms to relieve the oppressive heats of summer.—This is wrong, as a *circulation* of air may be secured without *ventilation*. By the term we mean a supply of five cubic feet of fresh air per minute to every occupant of a room, and the discharge of the *effete* or *respired* air. This subject should challenge the attention of all persons, in constructing dwellings, and is one that can no longer be dispensed with in the construction of churches, school houses, and public halls. The architect can in no way avoid its responsibility. We can readily warm an apartment, our furnaces and stoves are ample, yet—warmth is not the only requisite. Is five cubic feet of air per minute necessary for the well-being of every person? Physiologists and chemists assert this fact, and if any one dispute it—let him procure a gum elastic bag—measure its contents, and test the fact by breathing therein. The effect on the feelings by the superinduction or fulness of the head—and quick breathing—accompanied with a sense of suffocation, will prove painfully the truth.

The admission of a free circulation of air in all dwellings is taken for granted—and the mode of its introduction is the proper question for discussion. Let us take a school room; for example—filled with active, growing beings; on whose health is as much dependendant as upon the knowledge to be there acquired. This house can have no ventilators as modernly constructed—at least none that are self-acting—and consequently self regulating. *Windows* are the only ventilators—or more properly refrigerators—as cold air in draughts may be thus designated. Are these sufficient? We assert they are not on principles of philosophy and hygean. The *feelings* of the teacher whose position is generally central regulates the warmth and ventilation of the house.—These are fitful and thus ventilation is irregular and uncertain. It, to be beneficial' should be certain and regular and can only be so by being *self-regulating*. Children near windows opened to ventilate are exposed to a dangerous draught of cool air—and moreover the carbonic acid gas evolved from the lungs sinks to the floor and will not be disturbed by a draught from a window. If you would remove this the draught must be long and strong, and thus dangerous and objectionable. We are aware of the recent discoveries of the diffusion of this dangerous gas, and believe the truth of these theories—yet in effect it is equally true will collect on or near the floor of the room—because air from the lungs being warm will ascend to the ceiling—in its ascent it cools and is forced along the ceiling by other currents and descends by the walls to the floor and there is restored to an equilibrium. Place a candle near the wall and you perceive a motion in the flame. Any of our churches or lecture rooms will attest the difference in temperature—the person may be comfortable while the feet are cold. Some years since a committee was appointed to examine the common schools of Boston, and ventilation of these apartments was reported on in these words: "Your committee found in their visits to the school houses, during the severest days of last winter, that no school room had less than three, and that more than half of them had at least seven windows, open for the admission of pure air. Yet this dangerous and injurious practice only mitigates the evil of bad air—by creating others. It produces colds and inflamatory complaints, and the air still remains impure, oppressive and highly deleterious, sufficiently so to affect the delicate organization of children, to blight their elasticity, and destroy the healthful physical action on which depends the vigor of maturer years." These facts are sufficient to *close* window ventilation and demand a resort to other modes less objectionable. If we can warm and ventilate a house by the same process, we have all that is demanded.—There can be no question, if you can eject warm air, but that you can favor the entrance of fresh cool air—and there can be as little question that if you have no escape you can have no supply. Air will not crowd itself into a room, which has no provision for the

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escape of that which already occupies it—nor will the atmosphere of a room leave it—unless, other air be admitted to supply its place.

Stoves and furnaces in the basement of a building will supply heated air, and flues in a ceiling will carry it off—but the effete air remains and produces effects quite as deleterious in consequences as the effects of cold draughts from windows. A stranger is surprised that in the construction of our dwellings, halls and churches, we have no fire places. He is suprised that our greatest desire is to save heat—regardless of ventilation. If we can combine the two, we reach the desired point. We want a simple ventilator, certain and self-acting, and we have it in the *open hearth*—or a fire place constructed as if for constant use. Place your large stove near the centre of the room, this will diffuse heat equally—have the pipe to penetrate the chimney near the ceiling above the fire-place—the air in the chimney becomes heated, is rarified and ascends—the open fire-place supplies cold air from the floor. This air is cold and vitiated from causes already mentioned and will in accordance with natural laws find its escape through the fire place and open throat of the chimney. The heated air in the room will go to the ceiling and perform a circle already described and when cooled, near the floor and mixed with the exhalation from the lungs will ascend the chimney and will be thus removed. Why should we not have chimney places in every house and several of them in every church, school house, and public hall? They are out of the way, may be made ornamental, and in spring and and fall supply the place of stoves. The air heated in the chimney by the smoke from the stove pipe, and its consequent ascension, gave Emerson his idea of ventilation. His whole theory is to burn in a flue, a gas or lamp burner—in large buildings he requires a furnace to rarify the air in them, and from the openings near or on the floor supplies cold air and thus ventilates the apartment. This is eminently successful and proves the mode we propose as true.—The common large stove will supply enough heat. This with any mode of ventilation cannot be excessive as ventilation being dependent upon heat will be proportionable—and a fire on the hearth will ventilate proportionate to its warmth.

We see this illustrated in parts of the country where the grates and fire places are sufficient to heat rooms and dwellings. Here we feel unable to listen to the most profound discourse in our crowded houses and lecture rooms—cold feet, hot heads, and sleep are natural results—and we feel unable to suppress a drowsiness not present in properly ventilated apartments.

One word more to teachers. The temperature of our climate changes, in spring and fall, unless you have systematic rules for lighting fires at those periods and cold rainy days intervene, you have serious results to the health of the children. They often come to school with wet or damp clothes, frequently with wet feet and must thus remain until dismissed or dried. In clear weather the chilliness of the air requires your attention in the supply of regular and necessary warmth. I have known illness result from children overheated in walking to school, then suddenly dispensing with overcoats or cloaks—in a room in which there is no fire or in one in which a fire has been recently built. Three periods require your attention—morning, after recess, and the time of dismission. The warmth of the room should be greater at the first two periods, and diminished at the latter. A child after passing into a room after exercising is liable to take cold—and one from a heated room to the cold chilly air is also liable to illness. You should depend on thermometers to regulate the temperature of your rooms and not on your own sensations—as your temperament, health, and clothing, are no criterion by which to judge of the comforts of others. If by my means I can call the attention of those who may have the construction of future school houses under their charge, or may desire the alteration of those now constructed, I shall have accomplished all I desire. The plan proposed for ventilation is cheap—is as effectual as Emerson's patent. It will ventilate, and will do so at the expense of neither time—money—nor heat.

MEDICUS.

To PREVENT MOTHS.—In the month of May beat your furs with an elastic stick, then wrap them in linen with pieces of camphor gum, box them up, and put in a dark place. Woolen goods should be preserved in the same way.

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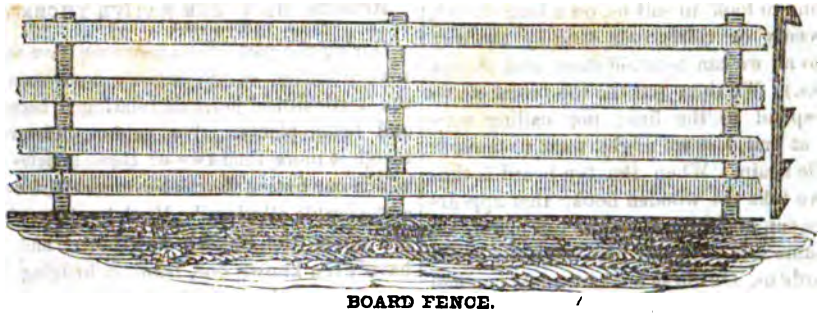

BOARD FENCE.

The subject of board fences may be considered a very simple matter by most of our readers; and one that many will think they already understand as well, or better than almost any editor. Well perhaps they do; and if so, no matter, we will offer a few suggestions for the balance.

In the first place, the amount of board fence being built in this country, is immense; (and still, not half so much as ought to be) probably a million of dollars, and may be more, will be thus invested in Wisconsin, Iowa and Minesota, the present year. Hence the importance of the best possible plan. An aditional board more or less will make a difference of some hundreds of thousands of dollars. A simpler, or easier mode, of making the fence, a saving of many thousands of days labor.

We have been making some miles of board fence, on our own farm during the last two years; and have had occasion to study out what we deemed the most economical style, and easiest mode of construction. The plan we herewith present, is the result of our experience, and our present mode of building. The main feature in it, is the using of four boards, instead of five, and the distance at which we put them on. We use all six inch boards, we place the first one up seven inches in the clear, from the ground; and between the first and second boards, we leave a space of five inches; between the second and third, eight inches; and between the third and fourth, ten inches. This makes a fence of the legal height, of four and a half feet, and close enough in all places, to turn everything but pigs; who may go under the bottom; to prevent which, we turn up a couple of furrows with the plow, on each side. It is but the work of a few moments, and not only keeps the pigs from running under, but a little ditch, thus made, beside a fence prevents all creatures from jumping over. It is worth more than the additional fifth board on a fence, and does not cost a tenth part as much. On the furrows thus turned up it is well to sow tame grass seed, which will soon grow and crowd out wild grass; the creatures will feed down the tame grass, and in that way remove all material, that the fire can catch at, to destroy the fence.

We break joints, in putting on the boards and always put the best board at the top, as it is most exposed. We char the ends of the posts, before putting them in the ground and place them top downwards as much as possible, both of which precautions will doubtless greatly improve their durability. We also take pains to heat our nails, by putting them in an old pan and burying them in a mound of chips on fire, where they are sure to heat red hot, and cool gradually; it is but the work of a few moments, and will double their strength and durability. We set all our posts exactly the same distance apart, and cut all our boards to the same length, before distributing them. We make our posts six and a half feet long, and set them two feet in the ground. We have little choice between a post augur or a good long handled spade; but think a good hand will dig full as fast and well with the latter.

When the posts are set, we proceed to put on the boards as follows: Take a common cotton packing twine, such as merchants use to tie up goods; (it is better than a chalk line, because it is lighter) and stretch it on the top of the post, where the top of the first board is to come, the object in this, is to get a straight line for the boards, or such curve over a swell, or through a hollow, as will look graceful, and neat. After getting

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the line to look to suit us, on a long stretch of twenty or thirty rods, (and by the way we do all we can to avoid short and abrupt crooks.) We then put the top board on, to correspond to the line; not nailing very tight at first, lest we might want to move it a little again. When the top board is thus on, we take the wooden hook, that appears in the cut, and hang it on the top board, on the same side with the post, with the hooks towards us. On these hooks we rest one end of the board, while we nail the other; thus we but on the balance of the boards, and the hook not only holds them while we nail, but holds each one, in just the right place, so that if the top board is right, all the others must of course come so. We claim that one man will put on as many boards in a day with this hook (which we can make in half an hour) as two men can without, and do it better also. We might go on, with a much longer chapter on fence making, and still not half exhaust the subject; but we leave it with the hope that those who have fences to make, will carefully weigh what we have said, and that when we travel through the country next summer, we will not see as many horrid looking fences, and as much waste of lumber, as we often have in times past.

We shall be well paid if we impress even upon a few minds, the important fact that a good board fence, cannot be made by every bungler, and that a poor one, is not worth as much as the lumber, before it was put on.

SEEDING DOWN LAND.

Messrs. Editors—I would be much pleased with a lesson in seeding down land to meadow. What kind of seed is best, and how much of each kind to the acre? What is the best kind of grain to seed with, &c. What is the best time to seed down.

Yours, J. B. Dawley, Plover, Wis.

In answer to the above, we would say, that we will publish an article in the April number, giving full instructions, and suggestions, on the highly important subject of seeding grass land, under all the modes and circumstances practised in this country. That will be soon enough for sowing, the coming spring. Your question in relation to pruning orchards, were answered last month, under our Horticultural head.—Eds.

HEDGES—No. 3.—OUR NATIVE THORNS.

During the past fifteen years we have read with attention everything we have seen in the horticultural journals relating to hedges, and hedge-plants. We cannot, however, recollect more than two or three articles in which our native thorns have received even a "favorable allusion." Much has been written about the English hawthorn; and we have even known one, bent on hedging his premises, send out to the "Old Country" for seed, when bushels of fruit, of a sort every way superior for his purposes, might have been gathered almost at his door. Of the six species of our native thorns, growing in the Northern States, at least two, viz: *C. punctata* and *C. coccinea*, are indigenous to Wisconsin and are found in abundance over nearly all parts of the state. *C. punctata*, (Dotted Thorn,) may be easily distinguished from the last, by its narrow wedge-shaped leaf, its more slender habit, and the dusky green and red color of its fruit. The growth is compact, and its numerous branches become, under the knife, almost impervious to the birds. (We have in our own grounds a row, consisting of some half a dozen plants, transplanted from the woods six years ago, and, headed back, through which, although they have not since been pruned, no fruit-stealing biped would attempt a passage.) As a hedge-plant it is to this country what the hawthorn, *C. oxyeantha*, is to England. *C. coccinea* (Scarlet Fruited Thorn,) is of a more robust and upright growth, with bright red fruit, and a leaf resembling somewhat that of the maple. Where a very strong and not a very close hedge is required, this is perhaps to be preferred to the other. The only objection we have heard against the use of these thorns for the purpose under consideration, is that they are liable to the attacks of the borer. We know that this objection is true in regard to the English hawthorn at the east, and that Downing enforced it against *C. crus-galli*, and *C. cordata*; but we believe that the harder bark, and hardier natures of our "natives," will withstand its assaults, if indeed, in this state they are liable thereto.

In order to grow plants for hedges, the fruit should be gathered when ripe, mixed with three times its bulk of sand, (to pre-

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vent fermentation.) and buried in the earth until one year from the following spring. The seed should then (by means of a seive) be separated from the sand and the remains of the fruit, and sown thinly in drills. At the expiration of two years they will, with good cultivation, be ready for the hedge-row.

MILWAUKEE, Feb. 1, 1856. C. G.

SUPPOSED SUBSTITUTE FOR THE POTATO

Some time ago two French periodicals, connected with agricultural pursuits, (the *Revue Horticale* and the *Bon Jardinier*,) made mention of a new esculent root, introduced into France in the year 1850, from Northern China, which it was supposed would prove a good substitute for the common potato, and supply the place which the diseased condition of that vegetable throughout Europe and the United States threatened to leave vacant. More recently, English agricultural journals have spoken in terms of great encouragement with reference to this new esculent, about which still further information is given in the last United States Patent Office Report.

This plant is called variously *Dioscorea Batatas*, *D' Japanica*, and *Ignam de la Chine*. It was introduced into the United States about a year ago, and Mr. William R. Prince, of Flushing, L. I., has had one season's experience in its cultivation, of which he publishes an interesting account in a late number of the N. Y. Tribune. Mr. P. says that the manner in which it may be planted and grown is very simple, and recommends identically the system now generally pursued in cultivating the sweet potato. He describes the roots as being from fifteen to twenty-five inches long and two inches in diameter, tapering from the head; the outward appearance being similar to the white variety of the sweet potato; skin thin, readily peeling off when cooked. This root is cooked in precisely the several methods in which the sweet and the common potato are cooked, and its flesh Mr. Prince describes as "snow white, delicately farinaceous, with a slight almond flavor, exceedingly grateful when used in the same manner as the ordinary potato, and deemed both richer in nutrition and superior in quality."

The root of this Chinese "potato" grows perpendicularly down into the ground, the same as the parsnip of our gardens, while its top, like that of the sweet potato, is a trailing vine. Of its productive qualities all the authorities speak in the very highest terms; in addition to which, it is supposed that the plant will prove hardy almost anywhere in the United States, while its tubers will keep through the winter, not suffering from hard frosts if permitted to remain in the ground. Among the sterling peculiarities of the plant is the following: that the roots, if suffered to remain undisturbed in the ground, continue to grow and enlarge for two or three years, remaining equally nutritious and equally excellent in flavor. The growth of the plant is very rapid. In middle and northern France, single roots have been dug in October weighing two to two and a half pounds, from tubers planted the previous April. The plant, at present, is not known to be affected by any disease, and the roots are said to continue fit for use though kept out of the ground, in a cool cellar, for a year—not sprouting, or losing any of their nutritive properties.

The *Dioscorea Batatas* is allied to several plants in North America, among which is the *D. Villosa*, (wild yam,) found frequently in hedgerows, and growing on the borders of ravines, from Canada to the Carolinas. Concurrent testimony induces us to think very highly of this plant, as a probable valuable addition to our table vegetables, but the account given of it by Mr. Prince, in his communication to the Tribune, smacks so much of the marvelous as to create an unwilling suspicion as to the truth of any of the stories told with reference to its many very remarkable qualities. [Louisville Comercial Rev.

IMPROVEMENT IN REAPING MACHINES.—By Alexander H. Caryl, of Sandusky, Ohio.—This improvement relates to the raking apparatus of reaping machines. The platform is composed of wooden slats slightly separated. The rake teeth project up through the slats, and the head to which the teeth are attached is moved back and forth beneath the platform, by means of peculiar mechanism. The teeth in their forward movement project through the slats and sweep the straw that may have accumulated on the platform off on to the ground. On their return movement the rake teeth turn down below the slats so as not to touch the straw, but they suddenly rise again, when the forward movement commences. This sudden rise and fall of the rake teeth is accomplished by means of a weight which is alternately wound up and discharged by the movement of the machine. This is a good improvement. [Scientific American.

FROZEN PLANTS.—If taken at once and thawed out in cold water, plants will not be injured, but if left to thaw by atmospheric heat, they will be destroyed. Do not give much water to plants at this season of the year, and keep them as far as possible in a temperature of 40 deg. to 50 deg., as by so doing you render them capable of enduring more extremes; and the plant will be much more strong and stocky in the spring.

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STOCK REGISTER.

HORSE PROVENDER.

The old custom of feeding corn and oats to horses without grinding, is now rapidly going into disuse among the more discriminating of our farmers. Probably the most economical provender that can be given to horses, while at work, is a mixture of two-thirds oat-meal, and one-third corn-meal ground fine. Chemists assure us that oat-meal contains much muscle, or flesh-forming matter, and corn meal much fat-forming material, and therefore when these two articles are fed in union, we get both these principles combined, and realize the benefits resulting from both. My own practice proves this theory correct. A late writer recommends a mixture of oats and rye for horses. The plan he recommends of raising these two grains together, strikes us favorably. This practice is termed *muzzlin* by the Germans, and is adopted by them in the cultivation of most cereals. The writer alluded to, says:—

"I had a conversation, recently, with an experienced farmer, having farmed both in this state, (N. Y.) and in Ohio, and his manner of raising horse food was this: 'I take,' said he, 'about 2 1-2 bushels of oats, and mix them with about one bushel of rye, and sow this quantity to the acre. The rye will support the oats, in case of a heavy growth, and prevent lodging. In this way I have raised sixty, seventy, and even eighty bushels to the acre.'" The soil must have been remarkably fertile, and well worked to produce such a crop, and we are inclined to suspect some typographical error; but be this as it may, the relative proportions of the two grains is about right, and there is no doubt that a greater acreable product may be secured by this practice than by sowing either of the grains by itself. Experience proves this to be the case, although it has failed to be generally appreciated. The *rationale* is not, however, clearly obvious, and has been the subject, therefore, of much angry disputation.

[Cor. Germantown (Pa.) Telegraph.

UNDER the head of the fossils discovered, one of the San Francisco city papers says:—"A curious article of the *real* soap has also been discovered, which closely resembles castile soap, and moreover answers an excellent purpose for washing. Specimens have been exhibited all over the state, and it is a fixed fact that a *mountain* of soap exists in California; and in a different locality, at the depth of 159 feet, decomposed oyster shells have been found in Table mountain."

The unconscious is the alone complete.

WARM STABLES.

Farmers are not generally careful enough in providing for their cattle and horses warm and comfortable stables, for winter. It was said by a wise man, many centuries ago, that "A merciful man regardeth the life of his beast." It may be thus paraphrased: A merciful or provident man regardeth the comfort of his cattle and horses during the inclement season.

The farmer who has, out of regard to the comfort of his beasts, prepared for them warm stables, has shown himself economical as well as merciful; for it requires much less feed to winter a stock in a warm barn, than in one that is open and cold; besides, his cattle retain their flesh better and look much sleeker. Hence the labor of tending them becomes a pleasure when compared with feeding a rough set of "scrubs" in an open, cold barn.

Cattle that are turned out to drink in winter, should, if the weather be cold and stormy, be put into stables soon after, unless the yard be protected from the uncomfortable severity of the weather.

During the icy state of the ground last winter, many farmers came to the conclusion that it is very necessary to have water in the barn-yard, and some remarked that it ought to be in the barn. Running water is preferable when it can be had; but if such cannot be obtained, it is better to dig a well in the yard and put in a pump, than that your herd should go any considerable distance for water. Much manure is saved by having water in the yard or barn, and besides this, the comfort of the cattle in bad weather is greatly increased and hay saved.

It is a good time for farmers to reflect on these things, and plan such improvements as will enhance, not only the comfort of the beasts, but will also greatly increase the pleasure and the economy of taking care of them. [Springfield Republican.

VALUE OF AN EDITOR'S TIME.—That renowned violinist, Miska Hansa, who has been traveling in Australia and the Sandwich Islands, gives the following account of how an editor in Sydney values his time:

"A few days after my arrival, I paid a visit to the different editors of Sydney. At my first call I came to a palace-like house, the ground floor being occupied by the printing office. On the first floor, among other advertisements, I found a tablet, informing visitors that the editor cannot be spoken with unless paid for his valuable time; accordingly everybody, without exception is advised to buy a ticket at the door of the waiting-room, one hour costing 10s.; half an hour, 6s,; fifteen minutes, 3s. Such were the contents of this singular price current of time."

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For the Farmer.

INFLAMATION OF THE LUNGS.

MESSRS. EDITORS:—It is the time of year when many horses by being over-drove, are taken sick with inflamation on the lungs.—The symptoms—the horse will appear dumpish, have a quick pulse, often turn his head to his side as though he had the cholic.—Give him 8 grains of white antimony, called by druggists tartaremetic) three times a day, morning, noon and night, in water. The horse will drink freely, and give light feed twice a day. In three days you will see it has the desired effect. If the horse is very violently taken with the inflamation, give him 10 to 12 grains of antimony the first day at each time.

From a person who has often tried it and never failed of curing the horse. N. P. P.

TARTER SHEEP.

In a communication, originally published in the Progressive Farmer, Dr. Emerson, of Philadelphia, gives some interesting information relative to this new breed of sheep, lately introduced into the United States from China. He describes them as of good size, with prominent or Roman noses, ears drooping forward, and agreeably expressive faces, which are covered with fine glossy hair. The fleece is unshrinkable, and best adapted for felting purposes and the coarser fabrics. The value of the breed, he thinks, consists mainly in the remarkable facility it offers to supply animal food of the most excellent quality, almost at pleasure, the ewes having lambs twice a year, and from two to four at a time. An ewe belonging to him brought three lambs in February, 1855, all of which were raised to maturity. Early in November she had two lambs more, whilst her two February ewe-lambs each brought a lamb at the same time, making her a grandmother in nine months, and her progeny within that time no less than seven!

With respect to the quality of the meat, the Doctor states that when in China several years ago, he was not little surprised to observe the eagerness manifested for mutton. Although capons, game and other luxuries were common upon the tables, he never saw a leg of Tartar mutton introduced where any thing was left but bones. He at first attributed this relish of mutton to its high price, ordinarily about 50 cents per pound. But he was afterwards convinced, that, after making due allowance for the cost, there was still more due to the intrinsic good qualities of the meat, which is entirely free from any woolly or other disagreeable taste, and remarkably delicate. [Phil. Ledger.

PARSNIPS FOR MILCH COWS.

Parsnips are very highly esteemed as food for milch cows, as well as for pigs and poultry, in the Island of Jersey, where they are extensively grown for this purpose. We quote from the *Cyclopedia of Agriculture:* "When parsnips are given to milk cows with a little hay, in the winter season, the butter is found to be of as fine a color and excellent flavor as when the animals are feeding in the best pastures. As parsnips contain six per cent. more mucilage than carrots, the difference may be sufficient to account for the superior fattening, as well as butter-making quality of parsnip. Don observes, that "in the fattening of cattle the parsnip is found equal if not superior to the carrot, performing the business with as much expedition, and affording meat of exquisite flavor, and of a highly juicy quality; the animals eat it with much greediness. The parsnips are given in the proportion of about 30 lbs. weight, morning, noon and night; the large ones being split into three or four pieces, and a little hay supplied in the intervals of these periods. The result of experiment has shown; that only in neat cattle, but in the fattening of hogs and poultry, the animals become fat much sooner, and are more healthy than when fed with any other root or vegetable; and that, besides, the meat is more sweet and delicious." [Country Gentleman.

ALL SORTS OF MINDS.

A strong disposition is in men of opposite minds to despise each other. A grave man cannot conceive of the use of wit in society; a person who takes a strong common-sense view of the subject, is for pushing out, by the head and shoulders an ingenious theorist, who catches at the slightest and faintest analogies; and an other man, who scents the ridiculous from afar, will hold no commerce with him who tests exquisitely the fine feelings of the heart, and is alive to nothing else; whereas talent is talent, and mind is mind, in all its branches! Wit gives to life one of its best flavors; common-sense leads to immediate action, and gives society its daily motion; large and comprehensive views cause its annual rotation; ridicule chastises folly and imprudences, and keeps men in their proper sphere; subtlety seizes hold of the fine threads of truth; analogy darts away in the most sublime discoveries; feeling paints all the exquisite passions of man's soul, and rewards him, by a thousand inward visitations, for the sorrows that come from without. God made it all! It is all good! We must despise no sort of talent; they all have their separate duties and uses—all the happiness of man for their object; they all improve, exalt and gladden life.

SIDNEY SMITH.

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CURB OR CHECK REIN ON HORSES.

One day last fall we were sitting in the store door of our friend Nelson, of Urbana; it was the day of the County Fair, and as Nelson's store is forenenst the public square, the rural equestrians came in and soon filled the rails with their saddle nags. The riders as usual hitched up the bridle rein over the horn of the saddle, and went to see the sights. We noticed one colt, a spirited iron gray, trussed up in this way, which soon began to show signs of intense torture. Our fingers began to itch to get hold of that curb; the colt riled at the rail, and we hitched about as uneasily in our seat, and finally as we were about going to the rescue, after saying to Nelson that a man deserved to be —— who would truss up a horse in that way, the gray luckily slipped the rein off the pommel, and out went his nose, the gladdest colt on the public square; and we were about to take off our hat and give three cheers, when we bethought it might compromise the dignity of the Cultivator, so we only clapped our hands, and gave three cheers inwardly.

But this is only one phase in the abuse of the check rein. Farmers are not the only sinners in this respect; in fact, they are least guilty, and it is because their horses are so seldom subjected to check that they suffer most intensely when it is imposed. Our town and city folks have most to answer for. Here we see even the cart-boys, with a ton of sand in their cart, and the poor horse—which is generally a cast-off omnibus or livery horse—checked up most unmercifully, because the ragged driver takes as much pride in having his team *look well*, as his more aristocratic predecessor; and at every jar of the cart, or misstep of the poor damaged brute that hauls it, the latter gets the full benefit of the jolt upon his jaws, which are by this time providentially pretty well hardened.

The evil begins much farther back. The colt in the barn-yard, that has never known restraint until now he is some three years old, is roughly caught, and a bit forced in his mouth, a crupper put over his tail, and a belt around his body, and then his nose drawn down in half way to his breast, when he is left to suffer and sulk, sometimes for half a day. When this editor was a lad, he was guilty of just such enormities, but these are among the original sins of which he has most heartily repented. In breaking a colt to bit, the rein should never be drawn so as to cause positive pain in the muscles of the neck; for besides the inhumanity and uselessness of such a course, the horse's mouth is irretrievably damaged by it for all further use; a good mouth is indispensable for a good saddle horse.

When the horse goes into harness, again comes the abominable curb, to make him hold up his head. As before remarked, in a little horse, with all his muscles in action, a moderate curb is not very painful, and is often useful after long habit, in steadying his carriage; it is like every other bad habit in this respect. But to hitch up the team to a post, leaving the curbs tightly drawn, is an unmitigated abuse. Every day we see fine carriage teams standing in that way, left by the hour. The noble beast first puts out his fore feet, then gathers again turns his neck quite to one side, then to the other side, to relieve the aching muscles, and all because the thoughtless driver had neglected to take the check reins out of the hooks, or for fear his team would get their heads down. On Sundays our devotions are often very much disturbed by such sights. Fine carriage teams are trussed up for two hours at the church doors, sometimes hot and in fly time; they can only twitch their skin and wag a stump of a tail; sometimes in winter, with the keen wind singing in their ears, and their forefeet in the frozen slush of the gutter. In such cases, if it were not Sunday, and if it were not for disturbing better worshippers, we would like to throw a torpedo into the pew of the owner, who ought to be made to sit astride of a sharp rail without any cushion on it, all the time his team was hitched up that way. [Ohio Cultivator.

JEFFERSON COUNTY AGRICULTURAL SOCIETY.—This association met at the Green Mountain House, Fort Atkinson, on the 5th inst., and elected the following officers for the ensuing year:

President, Justus Carpenter, Palmyra; Vice Presidents, N. P. Parsons, Cold Spring, and E. D. Masters, Jefferson; Secretary and Treasurer, Milton Snell, Fort Atkinson. An executive committee, consisting of a member from each township, was also elected.

The society is in a flourishing condition, and has adopted energetic plans for the future. Its vitality is of great consequence to Jefferson County, and we doubt not that they will sustain it liberally.

[Whitewater Gazette.

THE FATE OF MUMMIES.

The mummies of Egypt are sometimes quarried by the Arabs for fuel, and, whether those of the Pharaohs, their wives, their priests, or their slaves, are split open with the same indifference as so many pine logs. The gums and balsams used in embalming them, have made them a good substitute for bituminous coal; and thus the very means employed to preserve them have become the active agents of their dissipation.

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HORTICULTURE.

PLANTS FOR SHELTER—No. 2.

Let not those who consider evergreens beyond their reach, suppose that they must therefore be without the benefit and the pleasure of the shelter we write of. Deciduous trees, though more pervious to the wind than those we have considered, do nevertheless, so sift and break its force, as to render it comparatively innoxious. In this class we are inclined to give the preference to the *European Larch.* It grows with rapidity; is perfectly hardy, while its form, and the character of the tree make it interesting, even when denuded of foliage. The peculiar, delecate tint of its leaves in early spring, and its multitudinous crimson blossoms, are very beautiful. Plants of 18 to 24 inches high may be had at the eastern nurseries, at from $8.00 to $10.00 per hundred. They should be planted two and a half feet apart.

The *Mahaleb Cherry*, in its natural state, makes a handsome tree, something over 30 feet high. The branches are numerous, and the leaves bright, glossy, and beautiful in color. In rich, heavy soils, it grows so luxuriantly that the ends of the wood are liable to injury by the winter; we do not however regard this as an objection, as any slight damage of the sort is quickly covered by the new growth. The Mahaleb is extensively used as a stock for dwarfing the cherry, and may be had for $20.00 per thousand. Plants of one year old are the best. These should be planted about two feet apart. By shortening in the strongest shoots in June and in August, the screen may be made quite close and compact.

The *Privot* is an excellent plant for the purpose under consideration. It is slower in its growth, and more compact in its habit, than either of the preceeding, and it may be grown from cuttings or from seeds. If from the former, make the cuttings in the fall, bury them in the earth, and plant them the next spring, in rows 12 to 18 inches apart, and cultivate thoroughly. At one year old, transfer to the border, and plant 18 inches apart. This will do very well, but a better way would be to plant a double row with an interval of two feet and at the same distance in the rows. The plants should be so arranged that those of one row will stand opposite the spaces of the other. The Privet stands the shears perfectly well, and may be made and kept in any shape that seems desirable to the planter.

The *Scarlet fruited Thorn* is a robust and rapid grower, and by the moderate use of the knife or shears, may be made into an excellent screen. For this purpose it may be raised from the seed, in the manner recommended in an article on hedges, in this number, or if plants in the neighborhood are abundant enough to admit of a good selection, they may be taken from the woods and the fields. Those should be chosen that are of uniform strength, and not over an inch in diameter. At the time of transplanting, (Do it carefully and don't let the roots get dry!) thin out one half of the wood of the tops, and early the next spring, cut all the plants down within six or eight inches of the ground. Two feet apart is about the right distance at which to plant.

The *Lombardy Poplar* will be found very useful and convenient, where it is desirable to grow a screen as soon as possible. Cuttings of uniform size should, in the spring, be planted 12 inches apart, where the screen is to be made. Cut them back in the manner of a hedge for two years, and then top them and keep them at the hight they are wished to remain.

Many other plants might be named which would in some circumstances be of value for screens. We have suggested those which in our opinion are best, and most easily obtained. As it is quite possible that we have in this, and in the preceeding article, omitted to say something which ought to have been said, and which some of our readers would like to know, we will cheerfully respond to any inquiries that they may make on the subject. *

CONVENTION OF FRUIT GROWERS.—The annual meeting of the Association of Fruit Growers of Western New York was held at Rochester, a short time since. The Rochester Democrat says:—It was the pretty universal testimony that the product of apples is more remunerative than any other crop raised in this section. Several testified to the realization of from $100 to $150 per acre for apples. A gentleman from Oswego, said that it was the estimate of the fruit committee in that county, that one acre devoted to fruit was equal to twelve with any other crop.

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THE EFFECTS OF THE EXTREME COLD.

The disastrous effects of the present winter upon fruit trees in the nursery, the orchard, and the garden, will not fully appear until the spring. Enough, however, is now apparent, to check the hopes of the sanguine, and discourage the faint-hearted cultivator. Peaches are, in many localities, hurt beyond remedy. The young wood of plums is badly injured, and in some varieties, that of three or four years old is dead. Cherries have also been severely dealt with. Apples in the orchard are probably safe enough; but root grafted trees in the nurseries, have suffered some, "*if not more!*" Pears have by no means escaped. We have examined a score of trees in various situations, and find that in very many cases the inner bark of the young wood is more or less discolored, and in some instances the wood itself is quite black, and its tissues disorganized. In these circumstances we recommend our friends to get their knives ready, and at the first opening of spring to cut completely and thoroughly, back to the sound wood. Cut without compunction and as remorselessly as a surgeon in the Crimea.

P. S.—Our article on the Bark Louse, promised for this number, will appear in the next.

A. C.'s valuable article on the Washington Plum will appear in the April number.

ENCROACHMENTS OF THE OCEAN.

The New Jersey Geological Report shows that the Atlantic is steadily, and rather rapidly, encroaching upon the land on its coast.—At Cape Island the surf has eaten inwards full a mile since the revolution. Along the Bay Shore in Cape May the marsh wears away at the rate of a rod in two years. One of the beaches upon the coast is mentioned as having moved inward one hundred yards in the last twenty years. It is also the opinion of the oldest observers that the tides rise higher upon the eastern New Jersey uplands than formerly. Prof. Cook, of the Geological Survey, is confident that the shore is now settling at the rate of two feet in a hundred years. The sand beaches on the coast are drifting inward every year. Egg Island, the western point of Maurice River Cove, which in the year 1694, covered three hundred acres, now contains at low water from a half to three fourths of an acre, and at high water it is submerged.

At Lake Superior flour sells at $22 per bbl.

CULTIVATION OF CRANBERRIES.

At the New Hampshire State Fair, Richard Hall of Aubnrn, exhibited some cultivated cranberries raised in a run not very wet, but bordering upon the high land.—His process of cultivation he stated to be this: to remove the surface of the ground some three inches in depth, which in this case was carted to the pig sty; he then took sand from the shore of a pond, and spread it plentifully upon the ground, and set his vines two feet apart; the second year after this he had a plentiful crop.—This was done three years ago, and the vines now cover the ground completely, no grass or weeds being present. He has done nothing to the vines since, and says that the average yield will be, the present year, two bushels of cranberries to every ten feet square. He esteems this the most profitable crop he can cultivate. He has five acres of this land which he intends to appropriate to this use.

When it is considered that fruit is now sold at not less than two dollars a bushel in our markets, this may be considered as farming to some purpose and profit.—There are thousands of acres in New England which should undergo the same treatment. By such a course a great deal of wealth would be added to the community annually from the investment of a small amount of capital. Mr. Hall also stated that some cranberries in the immediate vicinity, growing naturally, had been destroyed by the frosts, while those cultivated were not injured in the least. [Me. Farmer.

THE GRASS CROP.—Among all the statistics with reference to the agricultural products of our country, which have been given to the public, those setting forth the quantity of grass yearly cut and put into market, have been entirely overlooked. In attending to this omission, Gov. Wright of Indiana, says that: "our grass crop is not properly appreciated. No crop approaches so nearly a spontaneous yield, and none affords so large a profit." The hay crop of the United States in 1850 he estimates at 13,000,000 tons; that for 1855 he estimates at 15,000,000 tons, which is worth $150,000,000; while the whole cotton crop is valued at only $128,000,000. Of this crop more than half is produced by the four States, New York, Ohio, Indiana, and Illinois. The grass crop, which is used for pasturage, is at least as valuable, so that single herb is worth annually, over $300,000,000.

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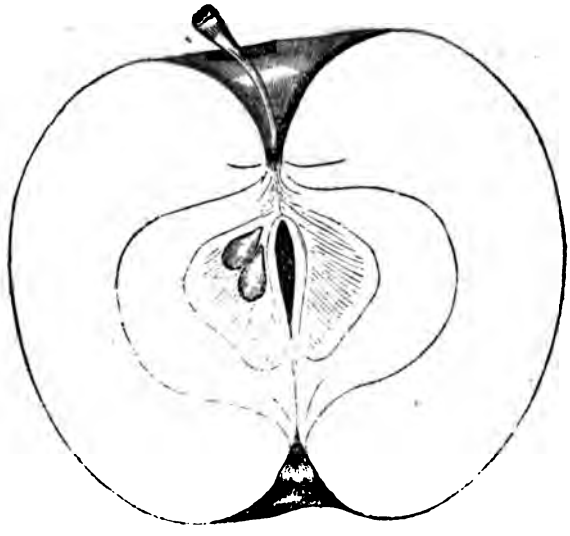

APPLES—WESTFIELD SEEK-NO-FARTHER.

Synonyms.—*Conceticut Seek-no-farther*—*New England Seek-no-farther*—*Red Winter Pearmain*—of some Western grower. This old and popular fruit deserves a place in every collection. Grown in rich alluvial soil of the south, it dose not keep as long as when grown on poorer soils at the North; but it looses none of its peculiar flavor or good qualities as a table fruit.

Size, medium.—*Form*, regular, roundish, conical, broadest at the base or stem end.—*Color*, light yellow ground, sunny side striped and splashed with red; small russet dots shaded around with light russet yellow; often considerable of russet about both stem and calyx; grown South, it is very much russetted, and about the stem the russet has appearance of rich bronze; progressing northward, it gradually losses its russet, until on light, sandy soil in Michigan, it becomes a pale yellow ground, with stripes and splashes of clear red and minute dots.—*Stem*, long and slender.—*Cavity*, open and regular.—*Calyx*, usually small, closed, sometimes half open, with short segments.—*Basin*, medium depth, regular form.—*Flesh*, yellowish, tender, sub-acid, with a rich pearmain flavor.—*Season*, November and March.

[Eliot.

Emerson, in a lecture on the Anglo-American, says:—"Americans would ride in steamers made of lucifer matches, if they could thereby save one hour in crossing the Atlantic.

Be generous to those who hold different opinions from you.

What Labor Does.—To show the effects of mechanical labor in advancing the price of iron, the North British Quarterly Review presents the following calculation:—"A bar of iron valued at $5, worked into horse shoes is worth $10,50; needles, $855; penknife blades, $3285; shirt buttons, $29,480; balance springs of watches, $250,000. Thirty-one pounds of iron have been made into wire upwards of one hundred and eleven miles in length, and so fine was the fabric that a part of it was converted, in lieu of horse-hair, into a barrister's wig.

The export of Indian Corn to Great Britain from the United States, from 1840 to 1845 inclusive, reaches an annual average of only 91,000 bushels. From 1846 to 1855, the average annual export is nearly 6,000,000 bushels. The export of Flour from this country to Great Britain, from 1840 to 1854, averaged 225,000 barrels per annum. From 1846 to 1854, the average has reached nearly 1,400,900 barrels per annum.—Phil. Corn Exchange.

Education in New York.—There are one hundred and twenty-five thousand children of the proper age for schooling in New York, and they are educated at the public; cost the annual expenditure of the city for that purpose being $917,853—almost one million of dollars. This is a much larger sum than is expended in any other city of the Union, and perhaps of the world. In addition to the amount named, it is believed that not less than $500,000 is annually spent for the support of private schools.

[Scientific American.

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FRUIT CULTURE.

We have received a copy of the Transactions of the Ohio Pomological Society, containing the proceedings of the Society at their recent session, at Cleveland, on the 8th, 9th, and 10th of January last. It was attended by the best pomologists and fruit culturists, of the northern and western states. Such men as Prince, Elwhanger, Barry, Kirtland, Elliot, Kennicott, &c. Hence their discussions and doings are of the highest interest. But unfortunately, like all councils of doctors, and learned men, there was a great deal of disagreement, on almost every subject, or fruit presented. But like the conflicting testimony in a law suit, we must cross examine for ourselves, and deduce conclusions, each for his own location, and circumstances. They endorse most of the standard apples, pears and plums, that are in the highest favor with the best of our own fruit growers.

We have been looking long and anxiously for the proceedings of our Wisconsin Fruit Growers Association, for last year, but still they linger. It seems to be one great misfortune with most such associations, that they are late in giving the results of their counsels to the public.

Many of our correspondents are anxious for a list of desirable fruit trees, and instruction as to the best modes of planting. We had intended to have furnished the fullest instructions on all these heads in the March number; but shall have to defer it until the next, as we wish to avail ourselves of the conclusions of the said F. G. A., that the list may be as perfect and reliable as possible.

We will not fail to furnish full, and reliable instructions, in the April number—not only as to varieties and kinds of fruit, and fruit trees of all kins, adapted to our climate; but also the best modes of planting and cultivation; together with full illustrations of the processes of grafting, budding, &c., &c. We do not propose to instruct old nurserymen, but will do what we can for all new beginners.

We want to see everything done that can be, in the way of fruit and orchard growing, and, as far as possible, done right.

While we shall be forward in recommending action, we shall be careful what we recommend.

Among other thing we would now recommend to all who conveniently can, to purchase some good work on Fruit growing.—The book-stores are full of them, and you can buy for a dollar, or ten shillings, what is worth fifty times the money to you, every year. Downing's, Allen's, Elliot's, and all good standard works; buy and read some one of them, and start right. It is all important.

PLANT LICE ON GRAPE VINES.

We make an extract from a paper by Mr. Townsend Glover on the Plant Louse, published in the Agricultural Report of the Patent Office:

The Plant Louse (*Aphis*) is very destructive to young shoots and leaves of grape vines, as they suck out the sap by means of a piercer or trunk, and thus enfeeble the system of the plant. The natural enemies also the same, as they are destroyed by the lady bird, the lace-wing fly and syrphus. I must, however, remark that the minute ichneumon fly which destroys the aphis on grape vines, differs essentially from that of the Cotton Louse, although its general form and habits are the same.

"When the vines are in small gardens the best remedy to destroy this pest would be to syringe the plants thoroughly, both on the upper and lower sides of the foliage, with a solution of whale oil soap. Dusting the leaves with lime has also been recommended; and in a green house these lice can be destroyed by a thorough fumigation with the smoke of tobacco."

EVERY THING depends on certain rules or causes. Take sheep to Central Africa, and their wool becomes hair; carry goats to the Arctic Sea, and their hair runs into furs. Place a man on a farm in the State of Massachusetts, and set him to work, and he becomes as penurious as an old maid. Send him to Wisconsin, with his plows and energy, and he becomes as generous as a drunken groceryman. Now why this difference? It all depends on certain causes. In Massachusetts, farmers grow twenty bushels of corn to the acre, and in Wisconsin, they grow sixty or seventy-five. In such instances it would seem that the dispositions of men are like potatoes—they spring from the soil. In other words, man's nature and disposition is governed by circumstances, and that therefore there must be a cause for the many peculiarities of persons of different localities in the world. There never was an effect without a cause. [Sparta Watchman.

Prepare your implements for spring work.

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THE IVY IN THE DUNGEON.

BY CHARLES MACKAY.

The Ivy in a dungeon grew,
Unfed by rain, uncheered by dew;
Its pallid leaflets only drank
Cave moistures foul and odors dank.

But through the dungeon grating high,
There fell a sun-beam from the sky;
It slept upon the grateful floor
In silent gladness evermore.

The ivy felt a tremor shoot
Through all its fibres to the root;
It felt the light, it saw the ray,
It strove to blossom into day.

It grew, it crept, it pushed, it clomb—
Long had the darkness been its home:
But well it knew, though veiled in night,
The goodness and the joy of light.

Its clinging roots grew deep and strong;
Its stem expanded firm and long;
And in the currents of the air
Its tender branches flourished fair.

It reached the beam; it thrilled, it curled,
It blessed the warmth that cheers the world,
It rose toward the dungeon bars,
It looked upon the sun and stars;

It felt the life of bursting spring,
It heard the happy sky lark sing;
It caught the breath of morns and eves,
And wooed the swallow to its leaves.

By rains, and dews, and sunshine fed,
Over the outer wall it spread;
And in the day beam waving free,
It grew into a steadfast tree.

Upon that solitary place
Its virtue threw adorning grace;
The matin birds became its guests,
And sang its praises from their nests.

Would'st know the moral of the rhyme?
Behold the heavenly light and climb;
To every dungeon comes a ray
Of God's interminable day.

YANKEE MANAGEMENT.—The sugar crop on the Island of Jamaica this season is 50,000 hhds. greater than ever before. This is attributed to the "Yankees" having taken the management of several of the largest sugar estates. In working, they employ the negroes at so much per day, paying *in cash* every week. The cash wakes up the best energies of the sable laborers and gives a life, never before seen or heard of, to the sugar making business. Cuba and our Southern States are likely to have, in a few years, an opportunity to compare, side by side, on every way equal terms, the advantages of free and slave labor. Our Southern planters will do well to study this "Yankee management" closely. They might find its adoption profitable to themselves. [Maine Farmer.

WINE MAKING IN MISSOURI.

Information brought out at the dinner of the Horticultural Society of St. Louis, gives a higher estimate of the progress made in wine making in Missouri than we had any idea of. It appears that at Herman alone, a small German village in Gasconade county, on the Missouri river, there are four hundred acres in vines. All around Herman are hills, and nothing but hills—the village being built in the only plain to be found. These hills are covered and crowned by fresh and luxuriant young vineyards, and from them will be produced this year from thirty to forty thousand gallons of wine, which is sold at the press at from $1 to $1 50 per gallon.—The business of wine making at Herman is already carried on under the division of labor necessary for the attainment of the greatest success. There are three classes, altogether distinct, now engaged in it—the grape growers, the wine pressers, and the wine merchant.

VEGETABLE GROWTHS OF CALIFORNIA.

An agricultural show has lately been held at Sacramento, at which the productions of the country were exhibited for prizes. The show of animals was remarkable only as giving evidence of considerable improvement in the breed of horses since the Americans have been in possession of the State.—The former from their variety and precocity, and the latter from their gigantic size.—Pumpkins weighing 129 pounds, beet-root 7 1-2 feet long, and a stalk of Indian corn 34 feet high, were among the "monsters" of the exhibition. The vegetables of California grow with a luxuriance unequalled elsewhere, but they are deficient in flavor. It appears that peach and pear trees frequently produce a double crop in the same season.—The productiveness of the strawberry plant is also very remarkable.

PARIS FUEL SHOPS.

The fuel required to cook a dinner in Paris costs nearly as much as the dinner itself. Fuel is very scarce, and the American is surprised to find shops all over the city, fitted up with shelves like those in shoe stores, upon which is stored wood, split up into pieces about the size of a man's finger, and done up in bundles, as matches were in the days of the tinder box, steel, and flint; they are about the size of a bunch of asparagus. These little bundles sell at from two to six sous. Larger sticks are bundled up in the same way, and sell at a frightful price. Charcoal is sold by the weight, and hard coal being nearly as expensive as wood, can be bought in the smallest quantity at any of these fuel shops. [Scientific American.

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DOMESTIC ECONOMY.

DANGER IN USING LEAD PIPE.

The following instance of the injurious effects of lead pipes occurred in the family of a gentleman residing in the country. On his premises, about a quarter of a mile from his house, is a spring, noted for its excellence. From this spring he brought water to his house in *lead* pipes, and all went on well, except in the health of his household. Before long, however, his wife was taken sick and lingered for months, then died. He was also complaining, his whole system seeming deranged, as though dyspeptic. His sister was also strangely affected. However, no thought was given to the water, until a painter, who was employed for a few days, refused to drink it, on account of its being brought in *lead pipes*, saying that he had been sickened by so doing.

Before he left, he concluded to try the water, and as a consequence he was quite ill for some time; this opened the eyes of the proprietor, and he took a bottle to a chemist, who pronounced it poisonous. Since that time it has not been used for cooking or drinking by his family, who have, since its abandonment, regained their usual health.

One fact connected with it might be of use to others in testing their water when conducted through lead. It had been noticed that when turnips were boiled, they were afterwards very much discolored and quite dark; after an analysis had been made, a pail of water was taken from the spring, before entering the pipes, and the turnips boiled in this were white, and in all ways as they should be. A statement of these facts may serve a good end, and by noticing them may save much sickness, and even worse calamities. C. W. H., in Miner's Rural American.

Mr. Mechi, the distinguished agriculturist, affirms that every farmer Who cultivates two or three hundred acres, without a steam engine, has a great lesson to learn, since an efficient engine of four horse power will tire any sixteen real horses, the comparative cost being £150 against £600, besides eating nothing when not at work, and economising an immense amount in various ways, in casualties, disease, attendance and food.

Warts on Cows' Teats.—A correspondent writing to the Rural New-Yorker, some time since, in answer to an inquiry upon this subject, says:—"I have cured my cows of warty teats with the following:—Neat's foot oil, beef's gall, spirits of turpentine, and old brandy, equal parts of each. Shake well before using. It is an excellent liniment, and will take off callouses of long standing. Apply it once a day.

Whooping Cough.—The best kind of coffee prepared as for the table, and given as a common drink to the child, as warm as it can be drunk; and a piece of alum for the patient to lick as often as it may wish. Most children are fond of alum, and will get all they need without being urged, but if they dislike it, they must be made to taste of it eight or ten times in the course of the day. It will effectually break up the worst case of whooping cough in a very short time. To adults or children in the habit of taking coffee, the remedy is good for nothing.

To Remove Creases from Velvet.—Pass the under side of the velvet gently over a warm smoothing-iron. Let one person hold the velvet tight, and another pass the iron; then spread out the garment, and brush gently yet briskly with a velvet brush.

Camphor a Remedy for Mice.—Any one desirous of keeping seeds from the depredations of mice, can do so by mixing pieces of camphor gum in with the seeds. Camphor placed in drawers or trunks will prevent mice from doing them injury. The little animal objects to the odor, and keeps a good distance from it; he will seek food elsewhere.

To Take Grease out of Cloth.—The following is a cheap, simple, and efficacious receipt for taking grease out of cloth:—A fluid made of an ounce of liquid ammonia and four ounces of alchohol mixed with an equal quantity of water. There is no better preparation.

Mastic.—A cement which gradually indurates to a stony consistence, may be made by mixing 20 parts of clean river sand, two of litharge, and one of quicklime, into a thin putty with linseed oil. Quicklime may be replaced with litharge. When this cement is applied to mend broken pieces of stone, as steps of stairs, it acquires after some time a stony hardness. A similar composition has been applied to coat over brick walls under the name of mastic.

To Make Yellow Butter in Winter.—Put in yolk of eggs just before the butter comes, near the termination of the churning. This has been repeatedly tried, and makes very fine sweet butter. It is kept by many as a great secret, but its great value requires publicity.

Croup.—A piece of fresh lard, as large as a butternut, rubbed up with sugar, in the same way that butter and sugar are prepared for the dressing of puddings, divided in three parts, and given at intervals of twenty minutes, will relieve any one of croup not already allowed to progress to the fatal point.

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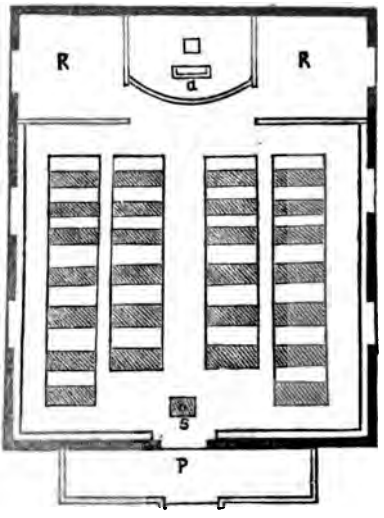
SCHOOL HOUSES.

We once heard a distinguished traveling lecturer on education, assert that he could at once tell a district school house from any other building, by its being the *worst-looking* house in the neighborhood. Broken windows and broken walls, and a general air of desolation, have in many cases been the leading features. If children are to be taught the knowledge of order and comfort, these are miserable examples to set before them—In strong contrast with such pictures is one described by Downing, a building erected for a *free scaool*, by a private gentleman, in Dutchess county, as an example for a district school. "It was a building simple enough after all. A projecting roof, with slightly ornamented brackets, a pretty porch, neat chimney tops; its culor a soft, neutral tint; these were its leading features. But a single glance at it, told in a moment that *the evil spirit had been cast out*, and the good spirit had taken its place. The utmost neatness and cleanliness in every part.—Beautilul vines and creepers climbed upon the walls and hung in festoons over the windows. Groups of trees and flowering shrubs were thriving within its enclosure. A bit of neat lawn surrounded the building, and was evidently an object of care and respect with the pupils themselves." Such an example before children could hardly fail to exert a controlling influence, to continue through after life.

It is not the manner of keeping, only, but the structure in erection, that demands a great improvement. Thousands of dollars—we might almost say millions—are yearly wasted in the erection of unsuitable school houses, which most commonly answer the purpose but very imperfetcly, and are not unfrequently a great waste of money by bad arrangement. State goverments could not better apply a little money than by publishing a small, well prepared pamphlet on the erection, arrangement, and furnishing of the cheaper district school houses, and sending a copy to every district.

The internal structure of a small house is exhibited in the accompanying plan. The teacher's desk, *a*, is on a raised platform; the pupils, desk are in front of this, and occupy the center of the room. The principal aisle runs through the middle, separating boys and girls. This should be four feet wide; the two smaller on either side need not be more than twenty inches wide. Each pupil is provided with a seat and desk, two pupils occupying, side by side, the same double seat—a greater number should never be placed together, for several reasons, one of which is, the inner ones cannot leave their seats without disturbing their neighbors. The smaller or narrower seats and



Fig, 1,—Ground Plan.

desks, for the smaller children, are placed nearest the teacher; these seats are about nine inches in width, and ten and a half high, with desks twelve inches wide, and twenty-one high. The larger seats are eleven and a half inches wide, and fourteen inches high, with desks fifteen inches wide and twenty-seven high. Every desk should be *numbered*. The stove is placed at S. R R are the recitation rooms, one of which may be used for the smaller children and the other for more advanced classes. If the teacher has one or more assistants, these rooms may be separately partioned off, or the partitions may be left open next the teacher's desk, but shut off from the rest of the school, or with sliding doors, so that he may hear one of the classes from his seat. Or if only one teacher is employed, there need be no partitions, and the same places occupied by the reciting classes; or, one of these rooms may be used for a library, &c. Each room should be furnished with blackboards, and now that clocks are so cheap, no school should be without one, to be placed over the teacher's desk. Outline maps may be hung on the partitions of the recitation rooms.—The entrance-porch, P, may be used for hanging up caps, &c., and it should, if practicable, be large enough to contain wood.

If a good well of water and pump could be added, it would be a great improvement. In some places conveniences for washing will be important.

The windows are placed on the two opposite sides—this arrangement lights a school room to the best advantage, and prevents that confusion of light where windows are on three sides.

For children who are compelled to sit

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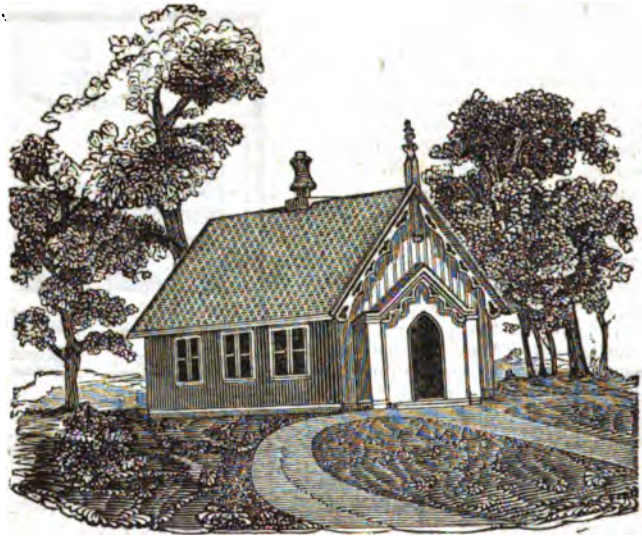

FIG. 3.—ELEVATION OF SCHOOL HOUSE.

several hours during a day, (which is sufficiently irksome and unnatural, to say the best) easy and comfortable seats should be provided.—Sitting long is harder for children than for adults; but few of the latter would be willing to sit so long, even for one day, to say nothing of repeating it for months.

FIG. 2.

Fig. 2 represents the simplest mode of making seats and desksks, yet has an important improvement, by giving a *slope* to the back of the seats.

A seat runs round the room on three sides next the walls, not commonly, but sometimes needed. The other seats connected with the desks are sufficient, in the plan, for 52 pupils, and may be increased or diminished without altering the general arrangement.—A house 24 by 28 feet will contain the accommodations here represented, and if built only one high story with *arched ceiling*, with vertical boarding and battens, need not cost more than four or five hundred dollars. It should have something of a tasteful exterior, for to children, lessons in neatness, taste, &c., are quite as important, even in an economical and practical point of view, as chemistry and algebra. [Annual Register.

A simple, cheap, and handsome style is shown in Fig. 3. Its semi-gothic style costs but little, and has quite a neat effect as a contrast, among the green trees and rural scenery of a country neighborhood.

We would advise all well established districts that purpose building school houses for the education and comfort of their children, not to feel too poor nor afraid of a little additional tax to build a decent house. Taxes well laid out in school houses, will never injure the inhabitants of a school district; and how often a little additional expense in the commencement, will save the outlay for building a new house again for many years, whereas, a poor thing has soon to be rebuilt at greatly enhanced expense and trouble. We say to all, do what you do (even for the public) well.—EDS. FARMER.

The School-house says to the poorest child —"You are rich in this one endowment, before which all external possessions grow dim. No piled up wealth, no social station, no throne reaches as high as that spiritual plane upon which every human being stands by virtue of humanity; and from that plane mingle now in the common school with the lowliest and lordliest, we give the opportunity to ascend as high as you may. We put into your hand the key of knowledge; leaving your religious convictions, with which we care not to interfere, to your chosen guides. So far as the intellectual path may lead, it is open to you. Go free! and when we consider the great principles which are thus practically confessed; when we consider the vast consequences which grow out of this; I think that the little village School-house dilates, grows splendid, makes our hearts beat with admiration and gratitude, makes us resolve that at all events, that must stand: for indeed it is one of the noblest symbols of the Republic [CHAPIN.

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VENTILATION OF THE SCHOOL-ROOM.

People are quite ready to acknowledge the necessity of an abundant and pure supply of air, but they recognize the abstract principle far more readily than they act upon it. In former times, when buildings were much more open than at present—when the broad throats of huge fire-places yawned across half the side of a room, and received within their jaws, for a single fire, a pile of wood sufficient to supply a stove for a week—when every window and door clattered in its frame, and admitted the outside atmosphere in quantities ample enough to make up for the draft of the chimney and the breathings of the inmates, there was no necessity for entering into any scientific arrangements for ventilation. The very absence of science in construction obviated its necessity, and made up for all deficiencies. But at the present day, when brick and stone are constructed into air-proof walls—when doors fit their casings, and windows their frames, in perfect joints—when roof, and ceiling, and partition, allow neither of admission nor exit for a breath of air, it is all important that the attention of the builder be called to the subject of ventilation. Especially should this be the case in school-houses and churches, where large numbers of persons are congregated.

Put one hundred pupils in any school-room, and let the ventilators be closed for half a day, and a person entering it from the fresh free air of the street, will perceive instantly a very offensive and depressing atmosphere. It contains all the elements of a subtle poison, and one, which carried to a higher degree of concentration, would produce almost instantaneous death.

Bad ventilation produces ill consequences in two ways; first, by depriving the respiratory organs of the necessary supply of oxygen, and secondly, by substituting a poison in the shape of carbonic acid in its stead. The former gas, inhaled in the air, supports in the animal system a slow combustion of the carbon elaborated from the food, and carried into the circulation. The result of this combustion in the animal economy, as in a fire-place, is carbonic acid accompanied by the evolution of heat; and the new gas is then exhaled in the place of the exhausted oxygen. Provision must be made for its removal, and for a fresh supply of oxygen, or disease and death will ensue. There are more scholars, twice told, injured, we venture to say, by sitting in ill-ventilated school-rooms, than by over mental or deficient physical exertion. [Rural New-Yorker.

PINCHBECK METAL took its name from one Nicholas Pinchbeck, a celebrated astronomical and musical clock maker. He lived about the year 1705.

HOME INSTRUCTION.

Sound sentiments are expressed in the following passages from the address of His Excellency, Joseph A. Wright, Governor of Indiana, delivered at the recent State Fair, held at Elmira, New York:

"At the base of the prosperity of any people lies this great principle—*Make labor fashionable at home.* Educate, instruct, encourage, and offer all the incentives you can offer, to give interest and dignity to labor *at home.* Enlist the heart and the intellect of the *family* in the support of a domestic system that will make labor attractive at the homestead. By means of the powerful influences of early home education, endeavor to invest practical labor with an interest that will cheer the heart of each member of the family; and thereby you will give to your household the grace, peace, refinement, and attraction which God designed a *home* should possess.

"The training and improvement of the physical, intellectual, social, and moral powers and sentiments of the youth of our country, requires something more than the school-house, academy, college, and university. The young mind should receive judicious training in the field, in the garden, in the barn, in the work-shop, in the parlor, in the kitchen—in a word, around the hearth-stone, at *home.*

"Whatever intellectual attainments your son may have acquired, he is unfit to go forth into society if he has not had thrown around him the genial and purifying influences of parents, sisters, brothers, and the *man-saving* influence of the family government. The nation must look for virtue, wisdom, and strength to the education that controls and shapes the *home policy* of the family circle. There can be no love of country where there is no love of home. Patriotism, true and genuine, the only kind worthy of the name, derives its mighty strength from fountains that gush out around the hearth-stone; and those who forget to cherish the household interests, will soon learn to look with indifference upon the interests of their common country.

"We must cultivate the roots—not the tops. We must make the *family government,* the school, the farm, the church, the shop, the agricultural fairs, the laboratories of our future greatness. We must educate our sons to be farmers, artisans, architects, engineers, geologists, botanists, chemists—in a word, practical men. Their eyes must be turned from Washington to their states, counties, townships, districts, *homes.* This is true patriotism; and the only patriotism that will perpetually preserve the nation."

IN THE GREAT work of self-improvement, the first step is to study ourselves.

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GOOD ADVICE FOR GIRLS.

Mr. Weaver's new work, "Aims and Aids for Girls and Young Women," will be found not less valuable than his former productions. As the publishers of the work, we prefer to show its quality by extracts from its pages rather than by remarks of our own, We select, therefore, a few short passages almost at random:

THE UNWISE SEPARATION OF THE SEXES.

"It is a well settled conviction of my mind that society separates too much its male and female youth. In our schools our boys and girls are separated. Almost the entire course of education is pursued in sexual isolation. The girls are taught that it is not pretty to be with the boys, and the boys that it is not manly to be with the girls; and yet both are anxious for each other's society. In this unnatural and unhappy state their imaginations are left to fill up the void made by the separation. Imagination seldom does such work well. I believe it is the grand corrupter of youth. The brother and sister should grow up together in the same family, be educated at the same school, engage in the same sports, and so far as practical, in the same labors. Their joys and sorrows, tastes and aims, should be mutual so far as possible. The same moral lessons, the same moral obligations and duties should bear upon them. The moral standard for the girl should be the moral standard for the boy. and he should be made to feel that the moment he falls below it he is unworthy, and must not expect her confidence and society. It is a sad error that the youths of our towns and country are separated in so many of the most important duties of life. They are permitted to come together only for sport and nonsence. Their study and work are separate. Hence the good influence which they ought to have upon each other is in a great measure lost. They are unacquainted with each other. They know not each other's natures. They have but little interest in each other's business and duties. They meet only to cajole and deceive each other. They wear masks in each other's presence. For this state of things no one in particular is to blame, but every one in general. It is the fault of society."

FASHIONABLE WOMEN.

"Fashion kills more women than toil and sorrow. Obedience to Fashion is a greater transgression of the laws of woman's nature, a greater injury to her physical and mental constitution, than the hardships of poverty and neglect. The slave-woman at her tasks will live and grow old and see two or three generations of her mistresses fade and pass away. The washerwoman, with scarce a ray of hope to cheer her in her toils, will live to see her fashionable sisters all die around her. The kitchen-maid is hearty and strong, and her lady has to be nursed like a sick baby. It is a sad truth that fashion-pampered women are almost worthless for all the great ends of human life. They have but little force of character; they have still less power of moral will, and quite as little physical energy. They live for no great purpose in life; they accomplish no worthy ends. They are only doll-forms in the hands of milliners and servants, to be dressed and fed to order. They dress nobody; they feed nobody; they instruct nobody; they bless nobody, and save nobody. They write no books; they set no rich examples of virtue and womanly life. If they rear children, servants and nurses do it all, save to conceive and give them birth. And when reared what are they? What do they ever amount to, but weak scions of the old stock? Who ever heard of a fashionable woman's child exhibiting any virtue or power of mind for which it became eminent? Read the biographies of our great and good men and women. Not one of them had a fashionable mother. They nearly all sprang from plain, strong-minded women, who had about as little to do with Fashion as with the changing clouds."

EMPLOYMENT AND OPPORTUNITY.

"I would have every boy and girl in the whole country taught to make their own living at some useful employment; to mark out for themselves a sphere of action and then fill that sphere; to be useful in some honorable pursuit. I would not put the boys to trades and professions to make them great and good, and fold up the girls' hands and lay them away in the drawer or shut them up in the parlor. I would not make the boys self-reliant and vigorous by generous employment, and the girls weak, puny, and dependant by idleness or folly. I would not give the boys opportunities to develope their powers and become noble men, and deprive the girls of all these glorious privileges. I would not open a thousand avenues to distinction, wealth, and worth to the boys, and comparatively none to the girls. I would not send the boys out into the field of life bravely to earn their own living, and grow strong in doing it, and the girls out to beg their living of the boys, and grow weak and worthless in their dependent beggary. I like the girls too well to have them thus mistreated. I would give them just as good a chance as the boys have. They should not be degraded with half pay, and only two or three ways to get a living, just because they were made to be women." [Life Illustrated.

IN CONVERSATION an old man should not use his wit till his wisdom fails him.

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MECHANICAL.

THE TEETH AND MANAGEMENT OF CIRCULAR SAWS.

MESSRS. EDITORS—The number of teeth a saw should have varies under different circumstances. In most mills they have thirty, which, generally, is too many, as the feed seldom exceeds 1 1-4 inches to each revolution of the saw, which gives each tooth but 1-24 of an inch to cut. A saw tooth, when properly dressed, will cut 1-8 of an inch at once, in most timber, requiring but a little more power than to cut 1-24, because the additional power is only required to split the saw-dust from the log, in lengths of 1-8 instead of 1-24 of an inch, an operation which is easily performed, as the fibers of timber offer but little resistance to their separation. There is a limit, however, to the amount each tooth will cut out advantageously, and it varies in different kinds of timber. The fibres of such timber as is difficult to split require to be cut in shorter lengths than that which splits easily. My opinion is, that a saw-tooth should cut at least 1-16 of an inch in the worst, and about 1-4 in the best timber; and where there is not sufficient power to secure this result every alternate tooth should be broken out; for 12-horse power, fifteen teeth in a saw are sufficient. Where less than 12-horse power is employed, the diameter of the saw should not exceed 48 inches. Indeed, the employment of two saws of small diameter, one placed above the other, results in a considerable saving of power, in some instances. In cases where the majority of lines do not exceed 12 inches in depth, two saws, each thirty-two inches in diameter should be employed. They cost $88, and cut a line of the same depth that a 58 inch saw cuts, which costs $170. The small saws, being thinner, cut a smaller kerf, and consequently consume less power. The saving of power is manifest, because the tooth is much nearer the center of the saw, and therefore exerts less leverage against the engine. The greatest objection to the employment of two saws lies in the difficulty of keeping them in line; but as the upper saw is chiefly used in reducing the log to the proper size for making plank; the seam comes off on the edge of one plank, and does not materially injure the lumber; A small saw is also easier kept in line than a large one, and the saving in cost, power, and timber, amply repays for what little additional attention is required.

The shape of the tooth is a matter of great importance. It should have as much pitch as possible, so as to cut, instead of scrape out the saw-dust, yet care should be taken that it is not so slender as to break. No more should be filed from the back of a tooth than is necessary, to prevent it from rubbing the log, and all the metal which is not required to strengthen the tooth should be filed from the front of the tooth, in order to give it as much pitch as possible.—J. W. GAREY; in Scientific American.

INVENTIONS IN THE LONDON CRYSTAL PALACE.

It is well known that the Crystal Palace which stood in Hyde Park in 1851, still exists, and in far greater splendor than when it attracted tens of thousands within its walls in that year. It was removed from London and re-erected at Sydenham—a few miles from the metropolis—on a bold hight, where it overlooks the adjacent country. It is divided into different apartments or courts, for the display of ancient and modern art, and on a beautiful day it is sometimes visited by twenty thousand persons, from all parts of the world.

We have just received a circular from the Secretary—G. Grove, Esq.—of the Association to whom the Palace belongs, informing us that the directors have appropriated a portion of the Palace for a "Court of Inventions," in which it is proposed to receive and exhibit free of rent, specimens, models, and drawings of newly invented and patented articles. This is a very worthy feature connected with the institution, and may be of advantage to American inventors who visit England with inventions for public exhibition and sale. [Scientific American.

ON SHOEING HORSES THAT OVER-REACH.

MR. EDITOR:—I was bred from my youth a blacksmith and farmer, and whether a natural mechanic or not, I was always anxious to know the whys and the wherefores of things, or more properly speaking, the casualities and preventives. I was also fond of trying experiments upon such things as appeared capable of improvements. I was generally in the shop with my father evenings, rainy days and such other times as I could be spared from farm or school. By being in the shop so much I obtained the views of the farmers generally, and by that was enabled to make many improvements on the farm. I learned also that many farmers entertain very erroneous views about blacksmithing (and I might add blacksmiths too;) still they were bound to dictate according to their prejudices; as, for instance, one says: "This horse over-reaches, I want you to put the forward shoes as far forward as possible, and set the hind shoes as far back, or he will tear them off." I would sometimes try to reason the case by saying the way to prevent a horse from over-reaching, is to augment the speed of the forward

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feet, and retard the motion of the hind ones; but in order to accomplish that, I shall have to reverse your directions. Some who had little or no mechanical genius, would cut short all arguments, and say, "follow my directions or else not shoe the horse." Of course, a mechanic must obey orders, if he breaks owners; so the horse would go out of the shop, nicely fettered, with his shoes clicking at every step; while perhaps the man of enquiry would desire a full explanation. My way is, to make the toe-caulks very low, and standing a little under, and the shoes set as far back as convenient on the forward feet, with high heeled caulks, so as to let them roll over as soon as possible. On the hind feet, I have the heel-caulk low, and the toe-caulk high, and projecting forward, thus keeping back the hind foot, while coming up over a high toe-caulk, giving time for the forward foot to come out of the way. If thus shod the horse will travel clean, without a click, and his speed will be increased on a trot, fifteen or twenty seconds in a mile. If acceptable, I may say something about shoeing foundered horses hereafter. DUX. In N. E. Farmer.

COMPOSITION OF GUNPOWDER.

Gunpowder is composed principally of saltpeter about 75 per cent., combined with charcoal about 15 per cent., and sulphur about 12 per cent. Each of these ingredients, as articles of merchandise and commerce, have advanced in their respective markets, in some instances upwards of 100 and even 150 per cent. Saltpeter principally comes from Bengal and the peninsula of British India. These circumstances have directed the attention of the scientific world towards the application of some other explosive powder or medium, which would be equally efficacious as gunpowder, and less costly. Gun cotton and fulminating silver have been the subject of experiment.

THE LARGEST MILL IN THE WORLD.—The largest and most comprehensive mill in the world is the Pacific, at Lawrence, Mass. The floor surface of this immense structure is 16 acres. The largest mill in England is 11 1-2 acres. There are now in operation 40,000 cotton spindles and 10,000 worsted spindles; and these are to be increased to 80,000 and 20,000 respectively. There are 1200 looms in operation to be increased to 2,400. These, with 2,000 persons, produce 300,000 pieces of cloth per annum—one half de laines. The weekly consumption of cotton is 20,000 pounds or 1,500,000 pounds per annum, and 500,000 pounds of wool. Once a month, the two thousand persons assemble at the cashiers office, where he pays out $50,000 to them for wages, appropriating to each one the exact amount she has earned.

RAILROADS OF THE UNITED STATES.

Dinsmore's excellent *Railroad Guide* for February contains a summary of the number of miles of railroad now in operation in the United States, from which we learn that we have more railroads than all other countries put together.

The total amount of railroads is 19,664, miles. Great Britain and Ireland have only about 8,500 miles in operation, while those on the continent of Europe do not amount to 6,000 miles. In 1828 there were only 3 miles of railroad in our country; in 1838, 1843 miles; in 1848, 5682 miles; consequently 13,162 miles have been built during the past seven years. This is a most astonishing and rapid increase, being nearly double those that were built during the previous twenty years.

New York has the greatest number of miles in operation, namely, 2692; Ohio is next, having 2427; Illinois comes next, having 1892; Pennsylvania next, having 1627; Indiana next, having 1482; and Massachusetts has 1317. No one of the other States come up to a thousand miles, and Arkansas, California, and Iowa, have none.

There are now 6000 miles more under construction—as much as there is in continental Europe—and these it is calculated, will be completed and in operation in two years.

The total value of completed railways at $30,000 per mile is $589,920,000. We do not know the exact cost of constructing railways per mile in Illinois and Indiana, but we have been informed that it does not amount to one-third that of Massachusetts, which cost over $40,000 per mile, owing to numerous deep cuttings, and heavy embankments being required. The western States being more level are better adapted than the Eastern States for building cheap railroads. The railroad interests are now a mighty power in the Federal Commonwealth.

SHEEP SHEARING MACHINES are now coming into general use. The apparatus is a box, about the size and something of the shape of a common brick. It is fastened to the arm of the shearer, who works the cutting part by moving a lever with his hand so as to produce a rapid oscillating motion of the knives. The knives are shielded by guards, similar in principle to those which are used for mowing machines, and although they can be made to cut very close, it is impossible for them to cut the skin. The machine works more rapidly than shears, and cuts very evenly.

THE THAYER RIFLE.—Mr. Thayer, the originator of the Emigrant Aid Society, has commenced at Worcester, on his own account the manufacture of a rifle said to be far superior even to Sharp's rifles.

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MISCELLANEOUS.

WHO IS A GENTLEMAN.

A gentleman is not merely a person acquainted with certain forms and etiquettes of life, easy and self-possessed in society, able to speak, and act, and move in the world without awkwardness, and free from habits which are vulgar and in bad taste. A gentleman is something much beyond this; that which lies at the root of all his ease, and refinement, and tact, and power of pleasing is the same spirit which lies at the root of every Christian virtue. It is the thoughtful desire of doing in every instance to others as he would that others should do unto him. He is constantly thinking, not indeed how he may give pleasure to others for the mere sense of pleasing, but how he can show respect for others—how he may avoid hurting their feelings. When he is in society he scrupulously ascertains the position and relation of every one with whom he is brought into contact, that he may give to each his due honor, his proper position. He studies how he may avoid touching in conversation upon any subject which may needlessly hurt their feelings—how he may abstain from any allusion which may call up a disagreeable or offensive association. A gentleman never alludes to, never even appears conscious of any personal defect, bodily deformity, inferiority of talent, of rank, of reputation, in the persons in whose society he is placed. He never assumes any superiority to himself—never ridicules, never sneers, never boasts, never makes a display of his own power, or rank, or advantages—such as is implied in ridicule, or sarcasm, or abuse—as he never indulges in habits, or tricks, or inclinations which may be offensive to others.

[Life Illustrated.

CURIOSITIES OF WATER.

Nor is the hailstone less soluble in earth than in air. Placed under a bell glass with twice its weight of lime, it gradually melts and disappears; and there remain four parts, instead of three, of perfectly dry earth under the glass. Of a plaster of Paris statue, weighing five pounds, more than one good pound is solidified water. Even the precious opal is but a mass of flint and water, combined in the proportion of nine grains of the earthy ingredient to one of the fluid. Of an acre of clay land a foot deep, weighing about one thousand two hundred tons, at least four hundred tons are water; and, even of the great mountain chains with which the globe is ribbed, many millions of tons are water solidified into earth.

Water, indeed, exists around us to an extent and under conditions which escape the notice of cursory observers. When the dyer buys of, the dry salter one hundred pounds each of alum, carbonate of soda, and soap, he obtains in exchange for his money, no less than forty-five pounds of water in the first lot, sixty-four pounds in the second, and a variable quantity, sometimes amounting to seventy-three and a half pounds, in the third. Even the transparent air we breathe contains, in ordinary weather, about five grains of water diffused through each cubic foot of its bulk, and thus rarified water no more wets the air, than the solidified water wets the lime or the opal in which it is absorbed.

ORIENTAL LOVE LETTER.

The following letter was sent by the Persian ambassador, Abba Mirza, to an English lady, who had made a deep impression upon his Excellency's heart:

"When your glances dart like arrows from the bow of your eyebrow, millions of hearts are wounded. You now direct your shafts against a languishing soul; but though aimed at it for the first time, their aim could not be missed. When sharing with you the intoxicating cup of love, if an angel descended from heaven, were to appear at the gate of my palace, I would not open it. In vain the most fatal examples warn us not to enter the bazaar of love; I heed them not, and constantly expose myself to new dangers. I have thrown open the magazine of my soul; alas! I tremble lest the purchaser should enter at my cost. My heart, sick with love for you, drinks with rapture the poisoned cup of death; but such are the transports I experience, that thousands must envy my lot. The dust of the threshold of your door is a precious ointment to my eye—why am I not permitted to enjoy it? A thousand afflictions weigh on the heart of the Ambassador—when separated from you, perhaps these lines may recall him to your memory."

NEAR THE GOAL.—To the privileged one who is surely near the goal, the noise and turmoil of life have passed away. The hopes it once inspired have long since departed. He looks on infancy and childhood with a placid smile, and says, "*I* shall soon know what the childhood of a new existence is;" on youth, and says, "*I* shall soon put on immortal youth;" on manhood, and says: "*I* shall soon attain to the stature of a *perfect* man in Christ Jesus. O, to Him who hath loved me, and hath given himself for me, to Him be glory now and evermore!"

"Only waiting till the angels
Open wide the mystic gate,
At whose feet I long have lingered,
Weary, poor, and desolate.

Even now I hear the footsteps,
And their voices far away;
If they call me I am waiting,
Only waiting to obey."

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AGRICULTURAL ODE.

BY WM. C. BRYANT.

Far back in ages
The plow with wreaths was crowned,
The hands of kings and sages
Entwined the chaplet round.
Till men of spoil
Disdained the toil
By which the world was nourished,
And blood and pillage were the soil
In which their laurels flourished;
Now the world her fault despairs—
The guilt that stains her story.
And weeps her crimes amid the cares
That formed her earliest glory.

The proud throne shall crumble,
The diadem shall wane,
The tribes of earth shall humble
The pride of those who reign,
And war shall lay
His pomp away;
The fame that heroes cherish,
The glory earned in deadly fray
Shall fade, decay and perish.
Honor waits o'er all the earth,
Through endless generations—
The art that calls the harvest forth
And feeds the expectant nations.

WORK FOR POSTERITY.

Work by all means, even if fortune has favored you. An idle man is a pest to society. Labor for others, even if your own wants are satisfied.

"What are you planting those trees for?" asked a young striplimg of a venerable old man. "You will never live to eat the fruit, nor yet to see them blossom."

"If I do not," replied the old man, "you may; and if you do not, *somebody* will; and so I shall confer a benefit to posterity."

"I love my ease too well," remarked the young man, "to work for unknown beings."

"Poor fellow," retorted the aged man, "I pity you, and if the fruit of my labor should come to maturity in my lifetime, you shall have a portion of it."

The youth was so struck at this picture of disinterestedness, that he became ever afterward, a cheerful worker for posterity.

The old man lived. Age neither bowed his frame nor "abated his natural force," and the trees he planted flourished and brought forth fruit. True to his promise, when he first gathered the fruit, he took a portion of the ripest and the best to his friend, who lived at some distance from his dwelling, and thus addressed him:

"Young man, the first gatherings of the trees I planted for posterity I have brought to your table; and with it I have brought an old man's counsel. Do not hesitate to work at any period of life. It may be that the benefit will come to thyself; but always remember that the fruits of thy labor will be a blessing to posterity."

The young man thanked the sire for his gentle reproof, and heeded the lesson. What he spent before in luxury he now held as a sacred trust, either to benefit the present generation, or to be a blessing to those who came after him. He died, and a large property was given to benevolent purposes; so that to this day many bless his memory.

Is not this a rebuke to those who selfishly expend in personal gratification the wealth of which they are stewards? Let each one ask himself, "What have I done to benefit my fellow men?"

FROZEN TO DEATH BY LAZINESS.

Under this head the *Courrier des Etats Unis* republishes from a French journal an account of the death of a woman named Lapine, of Plessier Hulen, in the Canton d' Oulchy. The family of the deceased, composed of three persons, never worked. Though they owned a little garden, they carefully abstained from cultivating it. During the extremely cold weather of the past month, they were in want of fuel. There were woods hard by, where dry sticks could be picked up. But not one of the family had the energy to go there. To avoid freezing, they began to burn their house. The roof went in detail, then the rafters, then the doors, and finaly the window sashes. The woman froze to death in the corner of the fireplace, after every thing inflamible had been burned up. She had left her husband's side at night, and crawled into the ashes for warmth. He called when he missed her, but would not get up to see what had become of her. In the morning he descried her, but laid still and shouted to a neighbor. This one came, and lifted for the sluggard husband, the corps of his sluggard wife from out of the cinders.

NAPOLEON.—Napier, in his History of the Peninsular War, makes the following excellent and just remarks on Napoleon;—"Self has no place in his policy save as his personal glory was identified with France and her prosperity. Never before did the world see a man soaring so high and devoid of all selfish ambition. Let those who, honestly seeking truth, doubt this, study Napoleon carefully; let them read the record of his second abdication, published by his brother Lucien, that stern republican who refused kingdoms at the price of his principles, and they will doubt no longer." This is a British writer who studied the affairs of the times in which Napoleon flurished with more than ordinary fidelity and intelligence, and who, withal, is as regular a specimen of John Bull as ever put pen on paper.

THERE IS but one step from the heights of philosophy to the shallows of quibble.

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EDITOR'S TABLE.

PRINTERS' TYPES AND INK.

The great revolutions wrought in human affairs, by printer's types and ink, are observable on all hands; by knowledge that was a few years ago locked up in books and libraries, and only accessible to the rich and learned, is now spread broadcast, like snow flakes over the nation, and world; almost as fully and promptly in the cot of the laborer, as in the palace. The Telegraph, and Railway, speed news in all directions, with the rapidity of thought; the rattling types, in city, village, and hamlet, lay it at once before the eye of every reader. What one knows, all know; and all respond as with one voice, or pulsation, on each question at issue. The press like an all-seeing eye, watches every movement, advises and directs, leads, and misleads, makes, and unmakes, fulminates war, and counsels peace, in a word, shapes, and follows public opinion. It has in fact, become the real Herculean Lever, that moves the world. The orator, instead of being heard by a few hundred persons, merely, is echoed through the public press, and speaks, to millions; the next throe of the press, re-echoes back the verdict of the public, on the sentiments or principles advanced; thus the world is enlightened and quickened in its onward progress, more perhaps, by types and ink, than any other of the great forces of the day.

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Missing Numbers for 1855.—We are frequently receiving letters from last year's subscribers to the Farmer, inquiring for missing numbers, which they never received. To all such we would say, that in buying the Farmer from its former proprietor, and publisher, Mark Miller, we did not receive any surplus copies of him, for last year, except perhaps a few scattering, irregular numbers; hence we have no means whatever of supplying them. We are aware that many of said subscribers did not receive the January and some other numbers at all, and have understood, that there were not enough published into a thousand or more, for all the subscribers. We regret that we cannot supply them. We intend to have a thousand extra copies, at the end of the year, for that portion of our next years subscribers, who will wish to commence with the first volume of our series. We shall always be glad to supply missing numbers to our subscribers, gratis, as we wish all to preserve and bind them for their libraries. We will willingly exchange the current volume of the farmer, to a limited extent, for full sets of last year's volume, with any who may wish so to do, as we would like a few more full sets of the Farmer, from the beginning. We have a number of complete sets, except last year.

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John H. Manny, of Rockford, Illinois, extensively known as the inventor and manufacturer of Manny's Reaper and Mower, died in Rockford on Thursday, 7th ult., of Consumption. He was only thirty years of age. Mr. Manny was one of the remarkable men of the age.

Last year, fully one fifth of the entire number of Reaping Machines made in the United States were made at Manny & Co's establishment at Rockford, and this year their operations were expected to reach upward of half a million dollars.

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Chief Justice Taney.—The whole country will be rejoiced to learn that the venerable Chief Justice of the Supreme Court of the United States has so far recovered from his late severe and protracted illness as to be able to resume his high official duties.

GROWING TIMBER ON RAILROADS.

Why do not our Rail Road companies, through this open western prairie country, plant and grow their own timber and fuel? What objection could there be to planting a belt on each side of their track, as wide as practicable, without being in the way; and for this purpose, it would be well for them to secure a tract of at least eight rods wide—especially through regions of country where the land is not particularly valuable. In addition to this, they often acquire small corners, and tracts, in obtaining the right of way, all of which might be used for the same purpose. It would be a much better use than growing weeds and foul stuff, to at length curse and overrun the adjoining lands, as is too often the case.

The cost of fitting the ground, and planting the timber would be but a few dollars per acre. The best way, would be, to sow the seed in nurseries first, and then transplant the trees, at one year old. The care of attending to them, after planting, would be but trifling; and if locust and the quick growing kinds of timber were used, the speed with which they would come forward to a useful size would be surprising. In from seven to ten years, they would supply the locomotives with fuel, and in from twelve to fifteen years, with cross ties, in the utmost profusion and of the finest quality—sufficient for re-laying the old, or building new roads. What could be more judicious or economical, than to cut their own wood, fence posts, and cross ties, right on their very track—where they can be loaded, and used, without the intervention of a team, or any extra expense whatever?

Furthermore, it would be a complete protection from the sun in summer, and the winds of winter; and what would be more important still, a perfect shield against snow-drifts—saving serious delays of trains, and vast expense in removing the snow. To offset against all of these benefits, we see no objections whatever, (although more experienced rail-road men may). Why then should not Rail Road companies turn their attention at once to the subject? If it would be as economical as it seems, they certainly ought, as a duty to themselves, to embark in it; nor are they under any less obligation to the public to do it; for, with cheaper fuel they could do business at a cheaper rate for the public; and, what would be better still, they would cease consuming the scanty forests of the country—like hydra-headed Leviathans, threatening an almost entire extermination of this article, indispensable to human life and economy.

We hope to hear from our numerous Rail Road companies some reason, if any can be urged, why the foregoing is not good logic; if it is, we hope soon to see the experiment tried, on a scale commensurate with its seeming importance. It seems to us no less demanded by the interests of the Rail Road companies, than by community at large.

—

Lucifer Matches.—A great many serious accidents have been occasioned by these inflammable little articles. But by an improvement which was exhibited at the French Industrial Exhibition, accidents may hereafter, in a great degree, be prevented. The two inflamable ingredients required to insure the ignition of matches were separated, and while one part was retained in the match, the other was lodged in the sand-paper upon which it was to be rubbed.

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Lake Superior Weather.—An exchange says that at Ontonagon the lowest temperature indicated by the thermometer, up to January 11th was 16 deg. below zero—not so cold by several degrees as it had been here to the same date.

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AGRICULTURAL PRODUCTIONS OF THE UNITED STATES FOR 1855.

We have been obligingly furnished, from the Patent Office, with the subjoined interesting approximate estimate of the Agricultural Products of the United States for the year 1855, made up from the most authentic accessible data, by D. J. Brown Esq., the efficient superintendent of the Agricultural Division of the Bureau. It may be here stated that if there is any error in the estimate, it is in falling below rather than above the truth, either in the quantity or value of the products.

VEGETABLE PRODUCTS.

Indian Corn	600,000,000 bu @ 60c	$360,000,000
Wheat	165,000,000 bu @ 1 50	247,500,000
Rye	14,000,000 bu @ 1 00	14,000,000
Barley	6,600,000 bu @ 90c	5,940,000
Oats	170,000,000 bu @ 40c	68,000,000
Buckwheat	10,000,000 bu @ 50c	5,000,000
Potatoes	110,000,000 bu @ 37c	41,250,000
Flaxseed	58,000 bu @ 1 25	72,500
Beans and Peas	9,500,000 bu @ 2 00	19,000,000
Seeds	1,000,000 bu @ 3 00	3,000,000
Rice	250,000,000 lbs @ 4c	10,000,000
Sugar (cane)	505,000,000 lbs @ 7c	35,350,000
Sugar (maple)	34,000,000 lbs @ 8c	2,720,000
Molasses	14,000,000 gls @ 30	4,200,000
Wine	2,500,000 gls @ 1 00	2,500,000
Hops	3,500,000 lbs @ 15c	525,000
Orchard Products		25,000,000
Garden Products		50,000,000
Tobacco	190,000,000 lbs @ 10c	19,000,000
Cotton	1,700,000,000 lbs @ 8c	136,000,000
Hemp	34,500 tns @ $100	3,450,000
Flax	800,000 lbs @ 10c	80,000
Hay and Fodder	16,000,000 tns @ $10	160,000,000
Pasturage		143,000,000
Total		1,355,587,500

DOMESTIC ANIMALS AND ANIMAL PRODUCTS.

Horned cattle	21,000,000 @ $20	420,000,000
Horses, Asses, Mules	5,100,000 @ $60	306,300,000
Sheep	23,500,000 @ $2	47,000,000
Swine	32,500,000 @ $5	160,000,000
Poultry		20,000,000
Slaughtered animals		200,000,000
Butter and Cheese	500,000,000 lbs @ 15c	75,000,000
Milk	1,000,000,000 gls @ 10c	100,000,000
Wool	60,000,000 lbs @ 35c	21,000,000
Beeswax and Honey	16,000,000 lbs @ 15c	2,400,000
Silk Cocoons	5,000 lbs @ 1 00	5,000
Total		1,352,005,000
Grand Total		2,707,592,500

By an examination and comparison, in the foregoing estimate, it will be seen that the corn crop of the United States, exceeds in value all the other grain crops put together, by about $20,000,500; and equals into a trifle, the aggregate of all the other grain crops, and the entire wool crop put together.

The corn crop of the North and Middle States, is worth almost three times as much as the cotton Crop of the South, and between two and three times as much as the three great staples of the South put together, of Cotton, Tobacco and Rice.

These are facts well worth the consideration of all thinking men, and suggestive of various ideas; among which, is why Cotton should be called King? Like many other earthly Kings, it sits upon a comparatively diminutive throne, and wields its dominion more on account of established prejudices, than any extraordinary actual superiority, as the leading commercial production.

Immense as is the Corn crop, there is no doubt, but that if a more intelligent and thorough system of cultivation, were practiced throughout the nation, the quantity might be nearly or quite doubled, without any material increase in the outlay or expence. Notwithstanding the vast importance of this crop, in a national point of view, it can hardly be denied, but that individuals, except perhaps in a few of the best corn growing States, consider it a crop of secondary importance, and pursue a course in its cultivation, in accordance with such conclusions.

A Disgraceful Affair.—We take the following account of an affray between two young men at Johnson's Centre, in Rock Co. from the Janesville Daily Free Press, of Friday, Feb. 15:—A difficulty occurred at a spelling school at Johnstown, on the evening of the 12th, between Milo Keech and James Riddle, in reference to some percussion caps which had been put into the stove. Riddle collared Keech, and threatened to "knock him if he did not shut his head," &c. The broil was hushed for the present, when Milo and his cousin, William H. Keech, left the house, followed by a number of persons, who it appears, expected a row. After they left the outer door Milo asked his cousin for "the pistol," which was handed to him. They had proceeded but a few steps from the school-house when some further altercation took place between Milo Keech and Riddle. Riddle took Keech by the collar and threatened further violence, when the latter drew the pistol and shot the former in the lower part of the breast, inflicting a dangerous and probably mortal wound. Keech immediately fled, but was promptly pursued and apprehended. Upon being caught he drew a knife, and was proceeding to open it, when the arrival of more assistance prevented his attempting to use it. Both he and his cousin were retained in the hands of proper officers until noon of the thirteenth, when their examination was commenced before Mr. Justice Kinney, upon a charge of assaulting with intent to murder. They were both held to bail in the sum of one thousand dollars for their appearance at the next term of the Circuit Court. The required bail was procured and the prisoners released from custody.

"Riddle was still alive on the 18th, at 5 o'clock P. M., though but faint hopes are entertained of his recovery."

Land Warrants.—Thompson's Reporter quotes prices as follows in New York, on the 9th ult.:

	Buying.	Selling.
160s	$1,05 ⅌ acre,	$1,08 ⅌ acre.
80s	1,05 " "	1,08 " "
120s	1,00 " "	1,03 " "
60s	1,00 " "	1,03 " "
40s	1,10 " "	1,15 " "

Festival of the Wisconsin Farmer's Club.—The festival given by the ladies of Whitewater in aid of the Wisconsin Farmer's and Mechanic's Club, a short time since, was well attended. The affair was a lively one and gave general satisfaction, and we regret very much that we were not able to accept the invitation from the managers to attend. The net proceeds amounted to about $300, which goes towards buying a tent for the society.

Hon. Ben. C. Eastman, late member of Congress, from the western district of Wisconsin, died at his residence in Platteville, Saturday morning, Feb. 9. Mr. E. was a man of ability, and a faithful representative. When the repeal of the Missouri Compromise was proposed, he abandoned the Administration, and was against the bill first, last, and all the time.—His remains were brought to this City, and interred in the Madison burying ground.

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WIND MILLS, ON THE PRAIRIES.

We learn from a Rochester Paper that there is a company formed in that city for the purpose of building Wind Flour Mills, on the prairies; and that they intend to erect fifty at different localities, during the coming season. They represent that they can build, and put them in complete operation, with two run of four feet stone, with all the requisite apparatus for first rate fine flouring, and custom work, for a sum not exceeding $5,000. And that they will do nearly or quite as good a business, as water or steam mills, and at much less expense than the latter.

The fall, winter, and spring seasons, when the heaviest part of milling is necessarily done, are usually abundant in wind power, in all elevated prairie locations. Considering that Wind Mills have probably been so much improved in this latter day, we see no reason why they may not be made to do good work, and prove a great blessing to many a neighborhood, remote from water power, or destitute of wood for steam.

That our farmers ought to grind more of their coarse grain, and will, when they have more conveniences for it, we have no doubt. We never shall be good and economical pork and beef makers without ground feed.

Then again, what would be a more commanding and finer ornament for the magnificent swelling prairie summits than the Windmill, with its picturesque outline, profiled in the sky, it would not only grind the farmer's grain, but awaken and call forth to utterance the poetry of his nature.

We say, success to the undertaking. We owe the winds a little grudge, for their unmannerly freaks, and "unholy alliance" with Jack Frost, to freeze ears and noses, on the bleak winter sides of the prairies. We would like to see them sobered down to steady and useful habits, and like Sampson of old made to turn the mill.

—

We notice with pleasure the meetings and proceedings of the different County Agricultural societies about the state. They speak well for the counties wherin they are located, and speak emphatically, also to those counties that are delaying, and doing without such organizations. Notwithstanding the low esteem in which such societies are held by some who are wise above what is written, there is no doubt but that a visible difference can be seen in the progress and results of counties maintaining good vigorous societies, and those that do without them. County Agricultural societies do not prejudicially interfere with a State Society; but, on the other hand, if judiciously directed, they are great auxilliaries and helpers to each other.

Why has not Dane County a good efficient society?—sufficient to call out and unite its best farmers and business men, in an effort of comparative taste, ingenuity, and skill? What would do more to advance them in their respective and high vocations? The same question may be asked with equal propriety of all other counties in the same condition. May we hope their numbers will be less ere long? The state would do itself no injustice by extending a limited pecuniary aid to county societies, upon some properly regulated basis. Illinois, and the other Western States are doing so, as a permanent and well settled policy.

—

Barnum's Financial Difficulties.—The N. Y. Tribune says: As we understand the facts in regard to the unfortunate entangling alliance, between the Jerome Clock Company and Mr. Barnum, the latter for the purpose, among other inducements of establishing a branch of the manufactory at East Bridgeport, where he was largely interested in land, agreed with the Clock Company to endorse and accept for them to the amount of one hundred and ten thousand dollars. The notes and acceptances endorsed by him were generally left blank as regarded the time they had to run, with the understanding that they were to be used mainly in renewals. He finds at last that the paper out, with his name on it, is over four hundred and fifty thousand dollars. If compelled to pay it, it would require the sacrifice of nearly one million dollars worth of property such as he owns to accomplish it. Leaving the sum in the notes to be filled up at the discretion of third parties is a dangerous thing. It is very easy to write ten thousand instead of one—particularly if the writer has not to pay the note himself.

—

A Western Editor's Serenade.—The editor of the "Wisconsin Mirror," which is published at Newport. Columbia Co., thus speaks of his first salutation by the minstrels of the night in his new location:—

How enchanting in the "stilly night," roaming far, far away along the land of dreams, loved ones near us, the golden brightness of elisium tempting us on from beauty to beauty, and the soothing strains of music soft and heavenly, flowing gently over our souls, and bearing us onward, dreamily, towards the fountains of delight! Thus it was with us. We had almost reached the golden gate—mysterious spirits gathered round us, and a voice deep and doleful burst upon our ears—Whoo—Whoo—Whoo-oo-oo!" We started from our slumber, raised our head—"Who, who art thou, thou ghost of night?" we stammered out.—"Whoo—Whoo—Whoo-oo-oo!" repeated our ghostly, goggle-eyed intruder, perched upon an oak that overhangs our dwelling, and evidently trying to learn "whoo" had encroached upon his retreat. We offered him a copy of the "Wisconsin Mirror" but he turned away, bawling louder than before—"Whoo—Whoo—Whoo-oo-oo!" We told him if such eyes as his couldn't read our name, he might cry "whoo" forever but we should not answer. This was our first serenade as editor in the woods.

—

One of the best corn growers in the state, in a recent conversation informed us that he could and did raise a large corn crop, from year to year, at an expense of not over fifteen cents per bushel, besides the rent of the land. But where you find one such man, you will find a dozen whose corn costs them thirty, forty, and even fifty cents per bushel—and all entirely on account of the difference in management. We have the promise of an article from the aforesaid good corn grower—detailing just the way he does it, and in time for next season's planting. We hope our farmers will read and heed it carefully, and profit from its suggestions.

One word more in relation to seed. It seems to be a common notion with many, that the kind of seed—so that it be some kind of dent, or flint corn—is not at all important. This is, undoubtedly, a serious mistake; as the difference in corn of the same general varieties, is in fact as great as the difference in wheat. Some kinds seem stunted down to a nubbin any way, whilst others grow long and handsome. These differences have a deal to do with the amount produced per acre. Doubtless an occasional change of seed, however good, is as important as a change in wheat, or any other kind of grain; yet, farmers seldom or never think of such a thing. But enough for the present—it is a subject which we shall resume again.

—

Ohio Prize Corn.—The prize crop of Indian corn, in the State of Ohio, for 1855, was 162 bushels per acre. Can not Wisconsin come up to this in '56?

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PROSPECT FOR CONTINUED FIGHTING.—The Paris correspondent of the National Intelligencer writes: "Thirty years of war and the utmost efforts of France and England, with Sardinia and such other secondary powers as they might be able to master in their train, would fail to force such a result. Moscow is less accessible than Paris; and France would be made to sign a treaty for the re-cession of Alsace on the Rhine, and for the neutralization of the Mediterranean sooner than Russia to sign one for the re-cession of Bessarabia and the neutralization of the Black Sea. Every sentiment of pride, dignity, and patriotism as a Sovereign and a Russian, compels the Czar to spurn a peace offered on these onerous conditions. If the Danube ever ceases to be a southern boundary of Russia, it will be, depend upon it, by virtue of her advance to the Balkan rather than of her retreat to the mountain range that separates the Pruth from the Dniester."

—

THE PAPER PLANT.—For the last few months there has been much talk about a plant, discovered by Mrs. Beaumont, of Grant county, Wis., which is claimed to yield two fibrous products—one resembling cotton, the other flax—that are particularly well adapted for the use of paper makers. The Buffalo Daily Express says that it has "given this matter some attention, having submitted specimens of the flax of the paper plant to the inspection and opinion of practical and experienced paper manufacturers. There is no humbug, but much money in this discovery. The plant grows readily, is easy of culture, and yields of the flax abundantly, say, from three to five tons to the acre. The product ready for the mill is worth at least $100 per ton. There is already a field of this plant in process of culture in Wisconsin, from which we received our samples." Of this plant we know but little, but if it fulfils present expectations, its introduction into general use will greatly reduce the present exorbitant price of paper.

—

ATKINS' SELF RAKING REAPER.—The reader will find the advertisement, and illustration of this celebrated reaper, in the present number. We have never had the pleasure of seeing one of them, in the harvest field; but have heard them highly extolled by those who have used them, and doubt not they are entitled to the world wide fame, which they enjoy.

—

WE occasionally hear of fruit trees being girdled, and destroyed by malicious persons, out of spite to some one with whom differences exist. It is an offence of a most scandalous nature, and deserves a severe punishment; none but the most mean and contemptable spirits would be guilty of such an offence against private property, and public utility. The lesser offence of pilfering fruit from the trees is bad enough, and both together ought to be scouted by every honorable minded man, or boy, as beneath the dignity of human nature.

—

NICARAGUA.—Fillibuster Kinney's new colony in Central America is attrcting considerable attention, for the richness of soil and mineral wealth. An enthusiastic correspondent at Nicaragua writes:—"The land is cheap and the soil very prolific. Indian corn, rice and frijoles, a nutritious article much used, yield, with scarcely any cultivation, three and often four crops a year. The plantain and farinaceous yam, the bread fruit and bread nut trees thrive amazingly. Wheat, barley, green peas, cauliflower, cos-lettuce, the avocate pear, sweet potatoes, okre and capsicum are all grown here. So are the banana, pine-apples, oranges, sweet lemons, limes, shaddocks, watermelons, muskmelons, guava, figs, tamarinds, pomegranates, sea grapes, cocoa, eschew, ground nuts. &c. The apple, pear, quince and cherry also thrive here, but are little cared for or cultivated. Besides this, it is one of the finest grazing countries in the world. Gold, silver, quicksilver, copper, lead, iron, litharge, and most other minerals that are in use, only await Yankee ingenuity to extract them from the bowels of the earth. Such is the nature of the soil that the exuberance of that wealth which rots upon the surface, in the less populous parts of this country, would amply clothe and satisfy with bread thousands of the sons of want, who fill your streets every winter."

—

CHICAGO SEED STORE, AND AGRICULTURAL WAREHOUSE.—The advertisement of H. D. EMERY & Co. will be found in our advertising pages, and they speak for themselves. We have received a catalogue of garden and field seeds for sale by this house, and find that it is a full and complete list.

—

THE DIOSCOREA BATATAS, or Japan Potato, a reference to which will be seen on another page of this number, seems to be attracting a great deal of attention. If it comes up to the expectation of some who are speculating on the subject, it will soon supercede the common potato, and greatly cheapen human, as well as animal subsistence. The length of time they have been grown in France ought, it would seem, to establish their character beyond peradventure. Still, we would advise people to embark moderately in all new things at first—there is so much Rohanism in the world, and especially in potatoes.

—

MADISON STEAM PLANING MILL.—We would call the attention of all intending to build, anywhere within the scope of the trade of Madison, to the establishment of Messrs. STEVENS & DONNELL. They have one of the finest steam Planing Mills, for House building, Sash, Door and Blind making, in the Western States. Their operating machinery is ample, and all of the newest and most approved eastern patterns. It is well worth the trouble, to any ingenious man to visit their works, simply to see their machinery operate, and to notice the perfection of their work, in all its multitudinous branches—including everything requisite in building a house, from the most delicate mouldings, to the most massy structures—all, all equally perfect, and shaming the most cunning productions of the human hand. We would advise all about to build, either in the city or country, to call and examine their stock before bargaining elsewhere. All who examine will find their works as much superior to the old Jack Plane, and Hand Saw, as the Reaper is ahead of the Sickle.

—

OSAGE ORANGE HEDGES.—In a former number, we made urgent inquiries among all the readers of the FARMER, for some one who had been successful in cultivating the above hedges, to maturity any where in this latitude. As yet we have not received a single favorable reply, from a living soul. Instead thereof, we have received divers windy articles, from those who believe *it can be done;* all very well in their way, but not to the point. Again we renew the inquiry, is there a man in Wisconsin who has succeeded in growing fifty rods of good and sufficient Osage Orange Hedge, for a farm fence? and if so, has it probably stood the past winter? These are the facts we wish to know, that we may lay them before our fifty thousand readers, early enough to instruct them as to their best course, in hedge operations the present spring. In conclusion, we say to all experimentors, send us the facts, not the theories.

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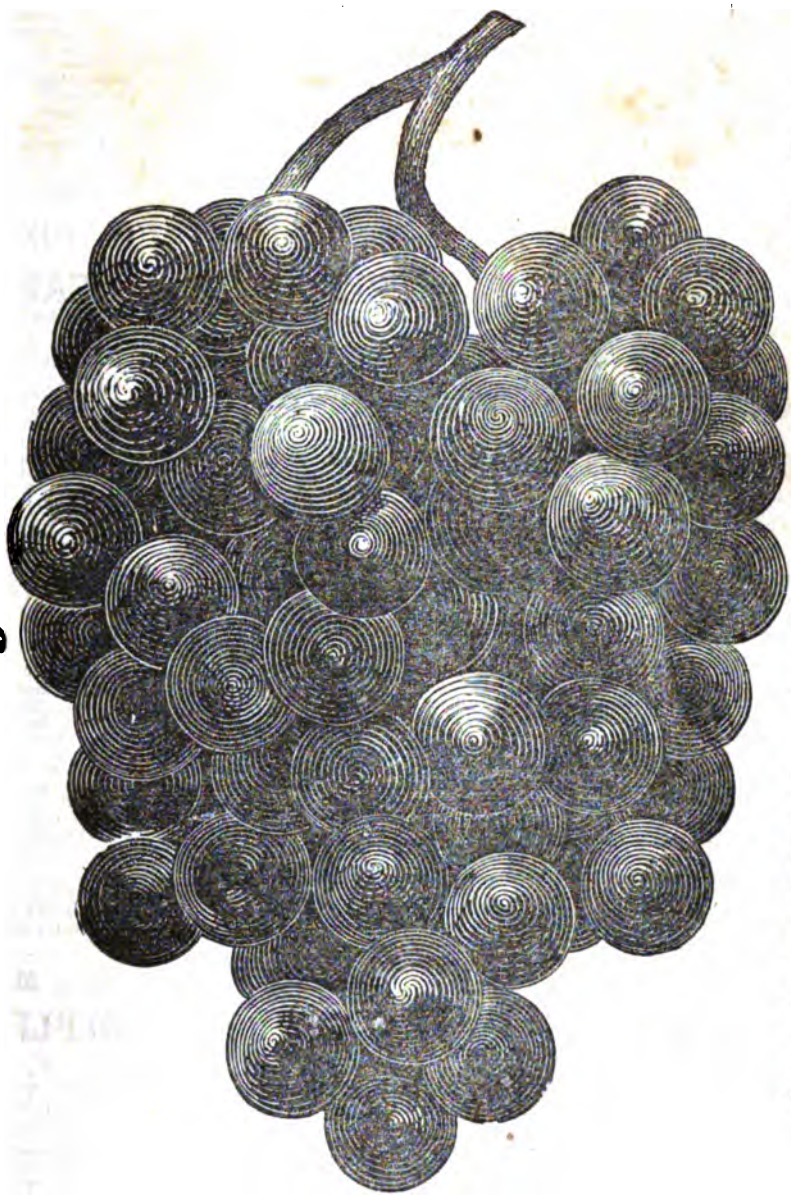
The Early Northern MUSCADINE GRAPE,



Of which the above is fac-simile of the cluster, ripens by

THE 15th OF SEPTEMBER,

Light amber color, medium size, delicious and unsurpassed flavor, of which thousands who have tasted the fruit are ready now to attest. The Subscribers, after having tried, within fifteen years, over forty native varieties of Grapes to find one that would compare with the above, either in point of profit to the grower, richness of flavor, productiveness, hardiness of vine, earliness in ripening, and in fine, one in which all the desirable qualities, seeming as if by nature combined, to richly load every farmer's garden in this rigorous climate with the most delicious of all Fruits, either as a desert for the table, or for producing the most pleasant of all liquids, fully equal in point of flavor to the best French Cordial, are now compelled to say they have utterly failed in the attempt, up to the present time. They are not afraid to challenge any one in this climate to produce its equal, and possessing all of these desirable qualities as a hardy Grape.

PRICES OF ROOTS vary from one to five dollars, according to their size, This Grape is an entirely new variety, produced by the subscribers from the seed of the white native grape.

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As there has been abroad many attempts to counterfeit the genuine Muscadine Grape, the Public are cautioned against procuring any grape for the Northern Muscadine only of the Subscribers, as they will hold themselves responsible only for the genuineness of such roots as are ordered to their personal address, or of their legally appointed Agents, who will be able to show proper reference

J. D. HAWKINS.
P. STEWART.
New Lebanon, Shaker Village Columbia Co. N. Y.

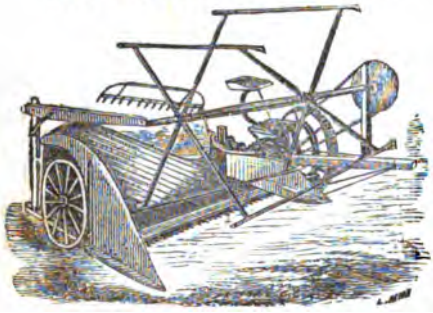
N. B.—This Grape has often ripened by the first of September, and always a month earlier than the Isabella, and six weeks earlier than the Catawba; and is by hundreds pronounced quite superior as a Table Grape.

ISAAC ATWOOD, Agent, Lake Mills, Jefferson County. All orders directed to him will receive attention.

The Subscriber has also for sale most of the varieties of Native Grapes that will stand this climate. Also, Standard and Dwarf Pear, Apple, Plum, Cherry Trees—Currants, Raspberries, and six of the best varieties of the Strawberry—at Rock Lake Vineyard and Nursery, in the village of Lake Mills.

March, 3m. ISAAC ATWOOD.

SEYMOUR & MORGAN'S



SELF-RAKING REAPER,

With Mower Attached.

ALL WHO HAVE used a Reaper know something of the labor and skill requisite to rake off the grain in *good* bundles, and a Self-Raking Reapdr which should be simple in its construction, and durable—performing the work better than the best hand raking machine—has been considered as a great desideratum by all intelligent farmers. Such a machine is now offered to the farmers of Wisconsin, represented in the above cut.

THE RAKE IS NOT LIABLE TO GET OUT OF order, (like those of some other machines offered to the public,) but is as durable as any other part of *this, or any othe Reaper*. Made in New York, of the best of eastern timber, this reaper cannot fail to give satisfaction.

Price—Delivered in Madison, $150, and the transportation, which is guaranteed not to exceed ten dollars—$60 paid on delivering, and note given for $100 and interest due 1st of December, 1856, which can be taken up for $95, if desired, after a fair trial in the harvest field.

For Circulars, descriptions, &c., apply to
S. L. SHELDON. Agent, Madison, Wis.

March, t. f.

FRUIT TREES.

A CHOICE collection of Fruit Trees, Shrubs, Vines, Plants, Roses, &c., cultivated and for sale by A. G. HANFORD, at his Nurseries, Waukesha, Waukesha Co., Wisconsin.

Apple, Pear, Plum, Apricot, Peach and Cherry Trees—Grape Vines, Currants, Gooseberries, Raspberries, and Strawberries in variety—Pie Plant and Asparagus—Houghton's Seedling Gooseberry (tree.) North River, Antwerps and Franconia Raspberries, in quantity for market planting.

Careful selections, embracing a suitable proportion of Summer, Autumn, and Winter varieties, ripening in succession, will be made by the proprietor when desired.

March, 3m. A. G. HANFORD.

CHOICE SEEDS.

500 BUSHELS of Clover and Timothy—One Hundred Bushels Superior Millet Seed—Five Hundred Bushels assorted Spring Wheat—One Hundred Bu. Peas—Osage Orange Seeds, and Plants—with a full stock of Garden and Field Seeds—Farm Implements, &c., for sale at 45 Franklin Street, Chicago, Illinois.

Feb 1, 1856.—2m. H. D. EMERY & CO.

ATKINS' AUTOMATON,

OR,

SELF-RAKING REAPER AND MOWER,

BEST MACHINE IN USE.

THERE ARE SIX GOOD REASONS FOR THIS unparalled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of Raking. 3d. It saves at least another hand in binding. 4th. It saves scattering by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf and does not drop, in the after handling, and the heads are not exposed in the stack, so that the GRAIN saving even exceeds the LABOR saving. 5th. It is a good Mower, being one of the best convertable machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 3 years) of

OVER SEVENTY FIRST PREMIUMS!

PRICE.—REAPER AND MOWER, $200,—$75 on its receipt, $75 first September, and $50 first December. Price of SELF-RAKING REAPER, only $175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discount for advance payment.

To secure a Machine, order immediately. Though so little known the past season, and none ready for delivery till 1st May, yet not two-thirds the customers could be supplied. The reputation of the Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand, as twelve hundred did last year, and we shall also be selling four months earlier.

☞ Order early, if you would not be disappointed.

PAMPHLETS giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants and prepaid.

☞ Write to us at CHICAGO, (Ill.,) DAYTON, (Ohio,) or BALTIMORE. (Md.,) whichever is nearest to you.

J. S. WRIGHT & Co.

"Prarie Farmer" Works, Chicago, Dec. 1st, 1855.

March, 4 m.

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND

MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6 by 6. 6. to 2.10 by 7 ft., 1¼ & 1⅜ in. thick, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We run two turning lathes, and do all kinds of turning. We keep a large assortment of Nervil's Banisters and Cabinet turning always on hand, and do Planing, Sawing, and in fact, make almost any thing of Wood.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.

March, 2m.

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CHICAGO AGRICULTURAL

Warehouse & Seedstore.

Warehouse and Sale Room 45 Franklin Street, between John and Randolph Streets.

THE subscriber, formerly connected with the "*Albany Agricultural Works, Albany, N. Y.*" has opened a Depot in Chicago, where may be found at all times a complete assortment of

FARM MACHINERY AND IMPLEMENTS,

of the most approved kinds—also a full stock of the best

Garden and Field Seeds.

☞ Full catalogues furnished *gratis* on application.

HENRY D. EMERY.

Feb. 1, 1856. 2m.

Nimble Giant Grist Mill.

FOR GRINDING all kinds of meal from wheat, corn, rye, &c., this is one of the greatest improvements of the present day. Also, cobs and corn feed, with a rapidity and ease not before acquired by any mill in the world. It is self-sharpening in its operation, and requires no mechanical skill to operate it. It can be applied to wind, steam, water or horse power. Warrented satisfactory.

Also, a full stock of

GARDEN AND FIELD SEEDS.

100 BUSHELS superior Millet, for sale at the Chicago Agricultural Warehouse and Seed Store.

March, 2m. H. D. EMERY & CO.

Little Giant Corn and Cob Mill.

DOUBTLESS, this is one of the most important inventions of modern times, for the farmer and stock grower. Its simplicity and durability recommend it to every one desiring such a machine. It occupies but little space, and is easily operated by any farm hand.

Prices, from $40 to $65. For sale at the Chicago Agricultural Warehouse and Seed Store, 45 Franklin Street, Chicago, Ill. HENRY D. EMERY.

Feb. 1, 1856. 2m.

SEYMOUR & MORGAN'S

PATENT IMPROVED NEW YORK

SELF-RAKING REAPER,

WITH MOWER ATTACHED!

THE SUBSCRIBER has obtained the agency for, and now offers for sale in the State of Wisconsin, these Reapers—manufactured by a firm who have probably had more experience in the business than any other in the United States, and who have been conducting a series of careful and expensive experiments, for years past, to *perfect* a Self-Raking Reaper. They have succeeded, and now offer their unequalled Reaper to the farmer—*warranting it* to cut, and lay off in good bundles, from ten to twenty acres per day, with *one man and team*; also, warranted to be made of the best materials.

Price:—$155,00 in Madison.

TERMS:—Fifty Dollars paid when taken—remainder in six months. Money refunded if not as represented.

P. S.—Circulars and descriptions sent to applicants.

Address S. L. SHELDON.

Madison, Feb. 1, 1856. t.f.

RURAL PUBLICATIONS.

THE COUNTRY GENTLEMAN.—A Quarto Weekly Journal of 16 pages, embracing every subject of practical interest to the Farmer and Country Resident, either in the Field or at the Fireside. New volumes commence 1st of January and July in each year. Price $2 a year.—☞ Send for a Specimen copy.

THE CULTIVATOR.—A Large Monthly Journal of 32 pages, exclusively devoted to Practical Agriculture Horticulture, and now about to commence its Twenty third year. Price, Fifty cents.

THE ILLUSTRATED ANNUAL REGISTER of Rural Affairs—Being a condensed Encyclopedia of Rural Matters, issued in yearly numbers, copiously illustrated, and got up in the best style. Price 25 cents.—Bound, Fifty cents—*Sent by mail post paid.*

The attention of all persons interested in Rural Pursuits is invited to the above works. All communications subscriptions and orders, should be addressed to

LUTHER TUCKER & SON,

Jan. Albany, N. Y.

Emery's Patent Portable Horse Powers.

SEPARATORS, Threshers, Saw Mills, Corn Shellers, Feed Cutters, &c., for Sale at 45 Franklin Street, Chicago, Illinois. HENRY. D. EMERY.

Feb. 1, 1856. 2m.

SEED WHEAT.

I HAVE EIGHT HUNDRED BUSHELS OF PURE "Golden Drop" Spring Wheat, which I offer for sale, delivered at Genesee, on the Milwaukee & Mississippi R. R., or at Ocotomowoc, on the Milwaukee & Watertown R. R., at two dollars per bushel.

I purchased my seed in Canada, last spring, and from its reputation there, and my experience here the past season, I am confident that it will supercede the "Canada Club," as an early variety, and for an abundant yield, on its introduction amongst our farmers.

All orders enclosing the money will be promptly attended to. Purchasers may forward their own bags, or the usual charge for such packages will be retained.

T. C. DOUSMAN.

WATERVILLE, Waukesha Co., Wis., Feb. 1,—t.f.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED " "
" " HORSE POWER THRESHER,
" " CORN PLANTER:
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz. Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f.

LA CROSSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

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BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Centinual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump: Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

ROCK COUNTY NURSERY.

Situated in the Southern Limits of the City of Janesville, (East side of the River) on the Telegraph Road to Beloit.

THE proprietors have now for sale a large stok of trees, at prices which cannot fail to suit purchasers, and having devoted their entire attention to their propagation and growth, having been to much expense in obtaining scions from bearing trees they feel warranted in recommending them to the public.

APPLE TREES 5 to 8 feet high 16 cts each or $140 per thousand.

PEAR, PLUM, and CHERRY, all of which are furnished Dwarf or Standard from 30 to 50 cts. each.

Those of extra size with fruit buds additional prices.

We would call particular attention to our stock of Evergreens, Ornamental Shrubbery, Bulbs, Roses, Plants &c., which we think is not excelled at the west. Nursery stocks, and scions furnished on liberal terms. Trees carefully packed for any part of the United States.

Catalogues sent gratis on application

Jan. tf. COLBY & WILLEY.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promply and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,

L. A. WINCHESTER, WM. DeWOLF.

D. S. DURRIE,

Wholesale and Retail Dealer in

BOOKS & STATIONERY,

BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.

January, tf.

MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Qdince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Symligas, Calycarthuses, Enonymuses, Honeysuckles, Bignonias, Prairie and other Roses —Dahlias, Gladiolusses, Tulips, &c., &c.

Osage Orange seed for sale. Orders sent by mail will receive prompt attention. H. F. BOND.

MADISON, WIS., Feb., 1856. t.f.

To Farmers and Gardeners.

YOUR attention is called to the Manures manufactured by the Lodi Manufacturing Co. from the contents of the Sinks and Privates of New York City, and free from offensive odor, called

POUDRETTE AND TAFEU.

Poudrette is composed of two-thirds night soil and one-third decomposed vegetable fibre. Tafeu is composed of three-fourths night soil and one-fourth No. 1 Peruvian Guano.

These manures are cheaper and better adapted for raising Corn, Garden Vegetables and Grass, than any other in market. Can be put in contact with the seed without injury, and causes Corn and seeds to come up sooner, ripen two weeks earlier, and yield one third more than other manures, and is a *sure preventative of Cut Worm.*

Two bbls. Poudrette or 100 lbs. Tafeu, will manure an acre of Corn in the hill. Tafeu 1 3-4 cents per lb. Paudrette $2, per bbl., or $1,50 for any quantity over 7 bbls., delivered on board vessel or Railroad, free from any charge or cartage. A pamphlet, containing every information, sent postpaid, to any one sending their address to

THE LODI MANUFACTURING CO.,

feb.2m 60 Courtland-st., New York.

MADISON PLOW FACTORY.

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel plows which we will sell cheaper than any other plow of the kind ever offered in this market.

We would also call your attention to our Breaking Plows, and we feel confident their equal cannot be found east or west, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

☞ TIBBITS & GORDON are the only Agents in Madison.

C. H. BILLINGS. S. H. CARMAN.

MADISON, Feb. 1, 1856. t.f.

Fairbank's Patent Scales.

These Scales have been long known, and have stood the severest test, and are always right. Judicial decisions have been made in several of the States, within the last few years, where a discrepancy in weights was the matter in controversy, and in every case has been decided in favor of the party using Fairbank's Scales, and upon the grounds that they are the standard Scale.

The genuine Fairbank's Scales are manufactured by E. & T. FAIRBANK'S & Co., under the supervision of the original Patentee, at St. Johnsbury, Vermont, and at no other place. Rail Track—Railroad—Depot—Warehouse—Miller—Hay—Coal—Farmer's—Cattle—Platform and Counter Scales, of every size and modification, for sale at manufacturer's prices, and warranted, both for accuracy and durability, by C. L. HARMON & Co., 197, South Water St., Chicago; LANSING BONNELL, 89 & 91, East Water St., Milwaukee; and by B. H. CHADBOURN, General Agent, 197, South Water St., Chicago. TIBBITS & GORDON, Agents, Madison. t. f. Jan'y. 1, 1856.

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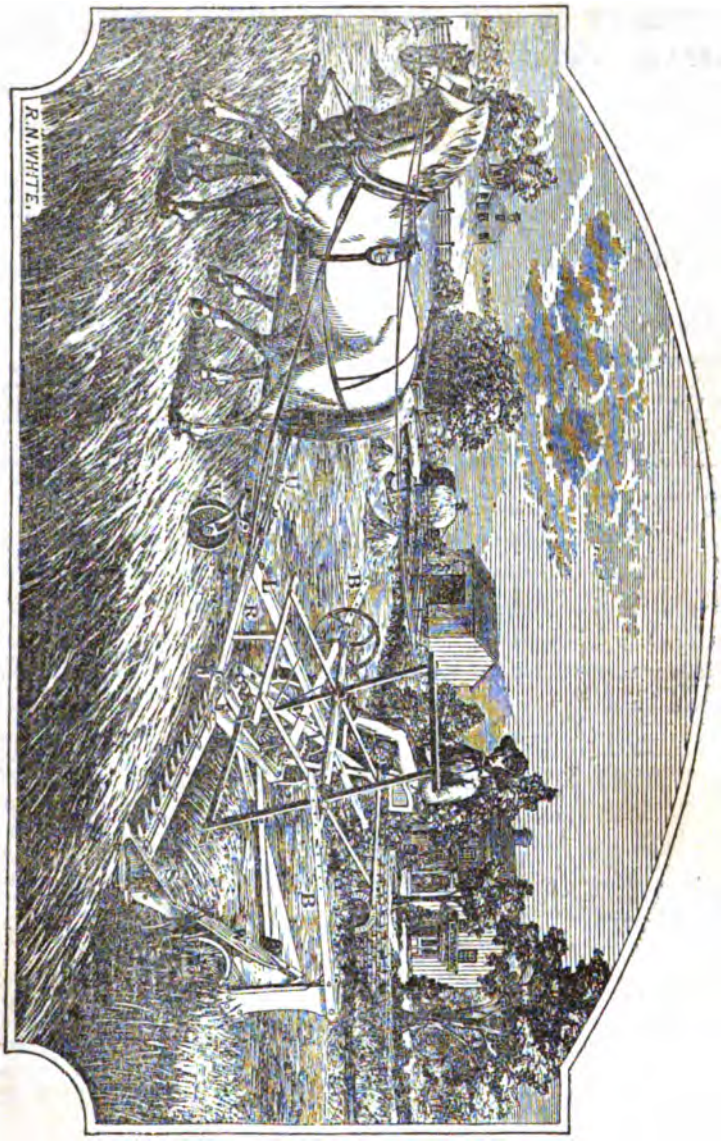

MANNY'S REAPER AND MOWER COMBINED—AS MOWING.

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent

ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation added, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - $135
For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - $185
For Single Mowing Machine, of about 5 feet cut - $120

Descriptive Phamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & Co., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices,

AT THE WISCONSIN FARMER OFFICE.

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UNIVERSITY OF WISCONSIN.

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——— ———, Professor of Surgery.
——— ———, Professor of Anatomy.
——— ———, Professor of Jurisprudence.

The vacant chairs of Medicine will, probably, be filled at the annual meeting of the Board of Regents, in January, and the Department will be opened as soon thereafter as shall be deemed advisable.

The First Department of the University, namely, that of "SCIENCE, LITERATURE AND ARTS," may now be regarded as completely organized; though the Professors, elect, of Mental Philosophy and of Chemistry, will not enter upon the duties of the Chairs, till the first of January, 1856—the beginning of the second term of the Collegiate year.

The number of students attendant on the instructions of the year just closed, (July 25, 1855), has been ninety-two; and a large increase is looked for under the new and full organization of the Collegiate Faculty.

INSTRUCTION.

The Collegiate Faculty will hold three regular terms of instruction annually, of thirteen weeks each, beginning:—

1, On the third Wednesday of September;
2, On the first Wednesday of January;
3, On the fourth Wednesday of April.

COMMENCEMENT, on the fourth Wednesday of July.

Teachers' Classes will annually receive professional instructions in Didactics, or the Art of Teaching, from Professor Read, of the Chair of English Literature.

Classes in Agricultural Chemistry will be formed each year, and receive instructions from Professor Carr, during our second term, and simultaneously with the session of the Legislature.

ACCOMMODATIONS.

The second College edifice has just been completed, and will be open for the accommodation of students in September. In the two buildings there are forty private studies, and about double that number of lodging rooms; besides ample public rooms for recitation and lecture. In the south wing of the new building are apartments for the residence of some of the families of the Faculty.

BOARD.

The large dining hall in the new building will be open for the accommodation of students, in connection with the families of the resident Faculty. Board of good quality will be furnished in the hall, at the family tables of the Professors, at or under two dollars per week. In order to carry out this plan with economy and safety, it has been ordered by the Executive Committee, that the student, on entering the hall, shall deposit with the Treasurer $25 for the term of thirteen weeks, or *pro rata* for any less time; the proper drawback to be paid over at the close of the term.

EXPENSES.

TUITION FEE, per term of thirteen weeks,...$4,00
ROOM RENT, INCLUDING HEAT, do. ... 8,00
Contingencies,..... 0,00
Total for the year, (three terms),..... $21,00

It is believed that the policy of the Board of Regents, in thus completing the appointments of the University, and adding greatly to its educational capabilities, as well as their further endeavors to render membership both economical and safe, will be met by a just public confidence, and a correspondent enlargement of patronage.

Additional information, relative to the University, may be obtained by addressing any member of the Board of Regents, or of the Faculty. JOHN H. LATHROP.

Madison, Jan. tf.

New Principle! No Poison!

RHODES'. FEVER AND AGUE CURE.

OR ANTIDOTE TO MALARIA,

FOR THE PREVENTION AND CURE OF

Fever and Ague, or Chill Fever; Dumb Ague, and other Intermittent and Remittent Fevers; also of Bilious Fevers, accompanied by Typhoid Symptoms; Typhoid Fever, Yellow Fever, Ship and Jail Fever, General Debility, Night Sweats, and all other forms of disease

WHICH HAVE A COMMON ORIGIN IN

MALARIA OR MIASMA.

This subtle atmospheric poison, which at certain seasons is unavoidably inhaled at every breath, is the same in character wherever it exists,—north, south, east, or west,—and will every where yield to this newly discovered ANTIDOTE, which neutralizes the poison, completely purifies the system, and thus entirely removes all the cause of disease.

The proprietor distinctly claims these extraordinary results from its use:

It will protect any resident or traveller, even in the most sickly or swampy localities from any ague or bilious disease whatever, or any injury from constantly inhaling Malaria or Miasma.

It will instantly check the ague in persons who have suffered for any length of time, from ONE DAY to TWENTY YEARS, so that they need never have ANOTHER CHILL, by continuing its use according to directions.

It will immediately relieve all the distressing results of bilious or ague diseases, such as general debility, night sweats, etc. The patient at once begins to recover appetite and strength, and continues until a permanent and radical cure is effected. And as a *proof* that it is also

WORTHY OF PUBLIC CONFIDENCE,

Because of its

SINGULAR AND ENTIRE HARMLESSNESS,

The following certificate from one of the most celebrated chemists in the United States is attached to every bottle:

NEW YORK, June 11, 1855.

"I have made a chemical examination of Rhodes' Fever and Ague Cure, or Antidote to Malaria, and have tested it for Arsenic, Mercury, Quinine and Strychnine, but have not found a particle of either in it, nor have I found any substance in its composition that would prove injurious to the constitution.

JAMES R. CHILTON, M. D., Chemist."

This allows of its

FREE USE AS A PREVENTIVE

by which all persons may thus be sure of entire freedom from the above named diseases no matter how sickly the season or swampy the locality.

PROOFS OF EFFICACY are frequently published, and the confidence of the public is asked only in proportion to its *actual merits* wherever introduced and used. These only are relied upon to prove its worth.

One or two bottles will answer for ordinary cases; some may require more. Directions printed in German, French and Spanish, accompany each bottle. Price One Dollar.

Prepared and sold by the proprietor,
JAMES A. RHODES, Providence, R. I.
STAINE & COOPER, Agent, Madison, Wis.
And for sale by druggists generally. [Jan.

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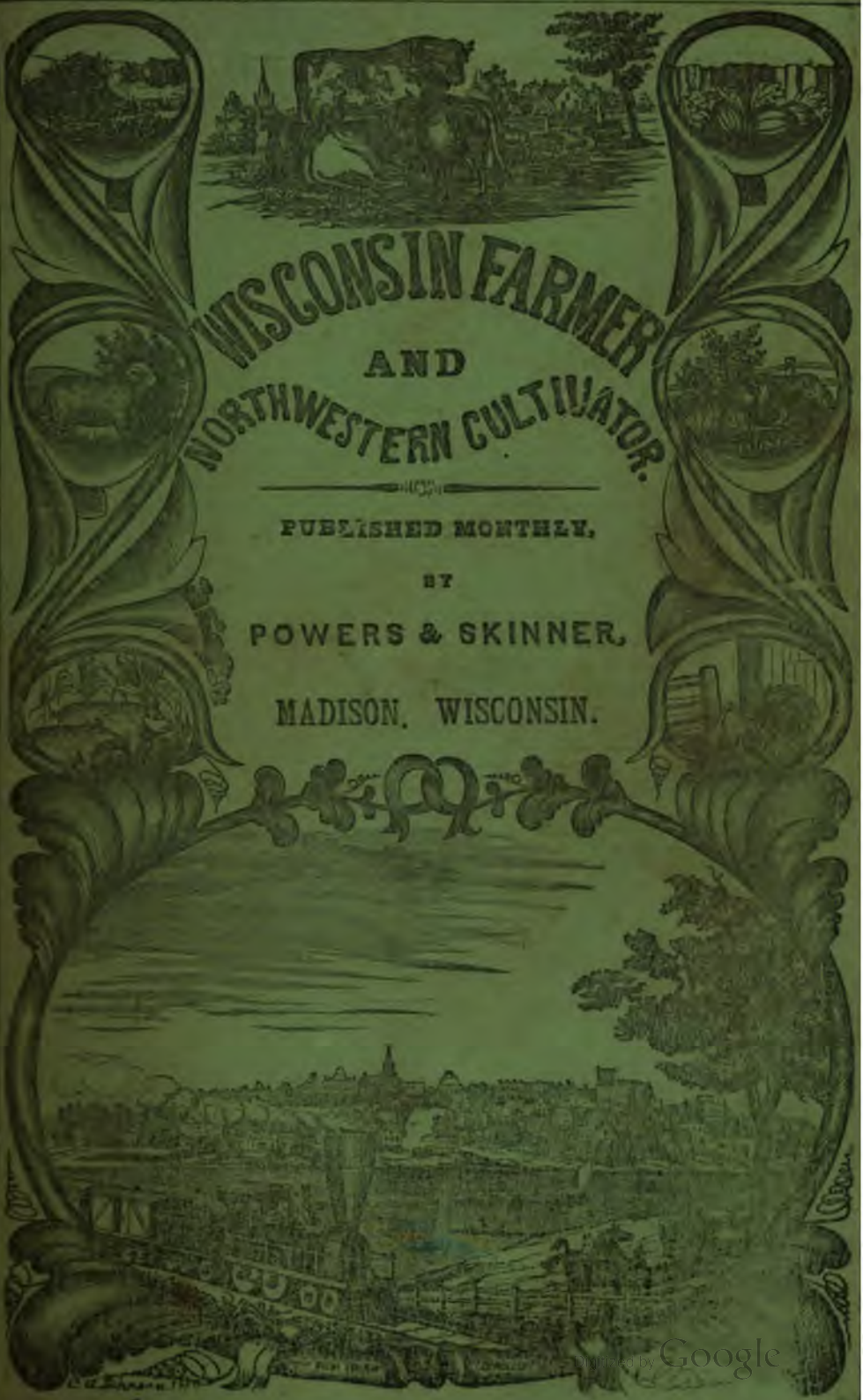
APRIL, 1856.



WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

CONTENTS FOR APRIL.

We are obliged to transfer the Table of Contents for this month from its proper place, to the last page of the Farmer, as we print the covers before the body is in type, to enable us to send the Title Page to New York to procure an electrotype from it.

TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with the Volume. Those wishing to subscribe, will confer a great favor by forwarding their subscriptions as early as possible. All monies for subscriptions should be forwarded with the order, and may be sent in reliable Bank bills, Postage Stamps, or Gold, by mail: and when the Postmaster is cognizant of its being sent, it may be considered at our risk.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**
MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

ATKINS' AUTOMATON,
OR,
SELF-RAKING REAPER
AND MOWER.

1 (the first,) used in 1852.
40 used successfully in 1853.
300 in twenty different States in 1854.
1200 in all parts of the Union in 1855.
3000 building for the harvest of 1856.

THERE ARE SIX GOOD REASONS FOR THIS unparalled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of Raking. 3d. It saves at least another hand in binding. 4th. It saves scattering by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf and does not drop, in the after handling, and the heads are not exposed in the stack, so that the GRAIN saving even exceeds the LABOR saving. 5th. It is a good Mower, being one of the best convertable machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 3 years) of

OVER SEVENTY FIRST PREMIUMS!

PRICE.—REAPER AND MOWER, $200,—$75 on its receipt, $75 first September, and $50 first December. Price of SELF-RAKING REAPER, only $175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discount for advance payment.

To secure a Machine, order immediately. Though so little known the past season, and none ready for delivery till 1st May, yet not two-thirds the customers could be supplied. The reputation of the Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand, as twelve hundred did last year, and we shall also be selling four months earlier.

☞ Order early, if you would not be disappointed.

PAMPHLETS giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants and prepaid.

☞ Write to us at CHICAGO, (Ill.,) DAYTON, (Ohio,) or BALTIMORE, (Md.,) whichever is nearest to you.

J. S. WRIGHT & Co.

"Prarie Farmer" Works, Chicago, Dec. 1st, 1855.

Madison Steam Planing Mill,
AND
SASH, DOOR AND BLIND
MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6×6. 6. to 2.10×7ft., 1¼ & 1½×⅜in. thick, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We run two turning lathes, and do all kinds of turning. We keep a large assortment of Nervil's Banisters and Cabinet turning always on hand, and do Planing, Sawing, and in fact, make almost any thing of Wood.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.

March, 2m.

FRUIT TREES.

A CHOICE collection of Fruit Trees, Shrubs, Vines, Plants, Roses, &c., cultivated and for sale by A. G. HANFORD, at his Nurseries, Waukesha, Waukesha Co., Wisconsin.

Apple, Pear, Plum, Apricot, Peach and Cherry Trees—Grape Vines, Currants, Gooseberries, Raspberries, and Strawberries in variety—Pie Plant and Asparagus—Houghton's Seedling Gooseberry (tree,) North River, Antwerps and Franconia Raspberries, in quantity for market planting.

Careful selections, embracing a suitable proportion of Summer, Autumn, and Winter varieties, ripening in succession, will be made by the proprietor when desired.

March, 3m. A. G. HANFORD.

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1865. Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., APRIL, 1856. NO. 4.

SUGGESTIONS FOR APRIL.

I mark'd the Spring as she pass'd along,
With her eye of light and her lip of song;
While she stole in peace o'er the green earth's breast.
While the streams sprang out from their icy rest.
The buds bent low to the breeze's sigh,
And their breath went forth in the scented sky;
When the fields look'd fresh in their sweet repose,
And the young dews slept on the new-born rose.

Willis Gaylord Clark.

April, like a coquette, smiles and frowns, alternately through the clouds, and usually dispenses about equal installments, of sunshine and rain. It is a busy season of preparation and labor, for farmers and horticulturists. The earlier the spring wheat is got in the better, and the better it is done, the larger and surer will be the crop. No mistake about that.

We have before adverted to the importance of clean seed, and would advise all to wash and lime their wheat, before sowing, it is but a small job; and if brine is used instead of water, all the oats, and foul seed, can be easily skimmed off. The lime, if of no other service, dries the grains for sowing, and probably protects it somewhat, from insects, birds, &c. Then again, lime is congenial to wheat generally. We washed our own seed last spring, with our own hands, for about forty acres; and the consequence was we raised a fine crop, clear of oats and smut; and run it through one of Ely & Co's. premium Fanning mills (and there never was a prettier, or better one) besides, before carrying it to market. And here we would digress to say, that we utterly disapprove of the systsm, too common among many western farmers, of carrying dirty wheat to market, because it can be cheated on to careless, or ignorant buyers, at the same price. Like many other cheats, it works well for the time, but ruins the character of Wisconsin wheat, in the end.

Don't sow less than one and three-fourths bushels of seed to the acre, and two bushels is often better still, especially when it is poorly dragged in; which by the way, is too frequently the case particularly on sod ground. We believe that cross plowing, or back setting, a great deal more than pays, on all new breaking, especially if, as is often the case it is broken early the year before, and more or less grown up to weeds, merely cross plowing in many such cases, will nearly double the crop, besides keeping the field much cleaner of weeds. Then we say begin your spring work as early as possible, so as to have time to do all those things as they should be.

Let not wheat sowing, nor anything else, prevent a proper and seasonable arrangement of the orchard. Secure your trees at once if you have not already, and be careful to get none but those you have every reason to believe are good ones. We repeat, don't let anything put you off *another year*, with the orchard; you cannot afford it, the growth of the trees is worth more than one hundred per cent. a year, if they are well attended to.

For the best mode of planting and cultivation, see the article on that subject, in the Horticultural department.

If you can possibly get time, even by rising an hour earlier, clean up neatly and promptly about your building. Remove the accumulated dirt and filth of winter, before it begets—contagion, or fleas; or proves a trail to the prairie fires, to burn you out. When the cleaning is done, then set out the shrubbery and ornamental trees about your dwelling; don't begrudge it, nor neglect it, until the season is past. A house yard and homestead, well adorned with shrubbery, shade and fruit trees, casts a halo of beauty and cheerfulness over a whole farm, and often adds from five to ten dollars per acre, to the value of the whole, in the estimation of a buyer. Then put in the shrubbery and trees, they will grow to bless and perpetuate your memory, may be long after you are gone to rest.

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Look well to your new milch cows, especially if they have been starved through the winter, they ought to be carefully nursed until they get well to grass, to insure a good yield of milk through the season. It is a thousand pities, that nearly all the bran and shorts, of the millions of bushels of Wisconsin grown wheat, should be sent out of the state for nothing; cheating the cows out of their best food for milk. Until we keep our cows' feed at home and cultivate a tame grass field for spring and fall feed, good butter and cheese will bring a high price, and be a scarce article. Tame grass fields, by the way, are one of the things every farmer needs, and must have, before he can keep stock to any advantage. The early frosts of autumn, and the late starts in the spring, make a foddering season of at least seven months in the year. Tame grasses of the right kinds, will shorten it up to five months, which makes a vast difference with many kinds of stock, and especially sheep.

Those who mean to stock down land to grass, the coming spring, should look up their seed and have it early; and also provide themselves with a roller, if they have not already got one; as it is impossible to lay down land well, without one. They are almost equally important in putting in wheat, and other grain; and a great benefit even in corn planting. No good farmer should do without one, in the prairie or open country.

EXETER, March 5, '56.

Messrs. EDITORS—If there is any one among your many subscribers who would communicate through the columns of your paper, any information concerning the utility of making use of water-lime pipes, for conveying water from springs to dwellings, barn yards, &c., and instructions for making the same, it would be valuable information to me, and I doubt not to many others.

Yours Truly, A. M. PARKER.

ENTERPRISING.—Roswell L. Colt, of Patterson, New Jersey, states in a letter to the commissioner of patents, that he has ordered from Scotland, the spawn of the trout, carp, and salmon, with the view of propagating them in the waters of New Jersey. He suggests that the patent office should import for distribution, the spawn of the red mullet of Europe, as well as that of sardines for breeding in the middle and Southern States.

For the Farmer.

THE ARUM FAMILY OF PLANTS.

BY DR. E. S. CARR.

The Arum Family, like that of which the Potato is now the most important member, is a very numerous one, and interesting alike to the Botanist, the Horticulturist, and the Political Economist. It embraces twenty-six genera, and nearly two hundred species, all of which are valuable either for their medicinal or esculent qualities.

Three centuries ago no one foresaw that an acrid, ill shaped American tuber would add millions to the population of Europe, and aid in the civilization of the world. If we look into the causes of national prosperity, we shall not unfrequently find them in some new discovery or development of the national agriculture. Had not our forefathers found the golden stores of maize in the rude granaries of the red man, how comparitively slow must have been their conquest of the soil of the new world! It is scarcely possible to over estimate the influence of maize culture upon American civilization.

What maize was to the aborigines and the early white settlers, what the potato in the most productive years is to Ireland, is *the Taro plant* to the inhabitonts of the South Sea Islands. This is known to botanists as the *colocasia macrorhiza*, and is by far the most productive and valuable plant found in a family of one hundred and seventy species.

The Taro is of about the same height, and occupies about the same amount of space as the common cabbage. Where it is cultivated to a considerable extent, it is not raised from seed, but is propagated by sections of the root in the same way that the *acorus calamus*, or "sweet flag" is in countries where it is not indigenous. The "*corms*" or roots are much larger than potatoes, and rival the sweet potato in sweetness and delicacy of flavor, while it is only equalled by the *yam* in productiveness. It is much more nutricious than either. Boiled or baked it is one of the most delicious substitutes for bread, and it is believed that if the starch with which it abounds was carefully separated and dried, it would exceed all other farinacious substances in value.

Boiled and mashed to a thick pulp, the Taro is allowed to ferment, when it forms

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the famous intoxicating drink *Poe*, the most common and popular beverage of the Sandwich Islanders.

Ordinarily, the plant is grown in very wet soil, the hollows or trenches in which it is planted being so deep, that when fully grown the tops shall be even with the surface of the ground, and so arranged as to allow of the abundant irrigation essential to their most luxuriant devolopment.

A variety of it, however, with smaller tubers, and these of stronger taste, is successfully grown on high lands, even at an elevation of eight hundred and a thousand feet above the level of the sea. Every where, and with all the varieties of the arum, the size of the tuber and its delicacy, seem to be in direct proportion to the amount of water with which it is supplied.

Other species of arum are highly esteemed as articles of food in the East Indies. The "Telinga potato," (arum campanulatum), yields a heavy crop of nourishing roots to the Bengalese husbandman; the "Kutchoo" and "Gaglee" of India, is identical with the arum maculatum of the isle of Portland, the powder of which, as Portland sago, is so eagerly sought in the markets of Europe. It is the daily food of thousands of Hindoo and Siamese families, and in the inhospitable Himalayas, another arum, the *colocasia himalayensis*, hoards its annual crop of generous tubers for the hardy peasantry.

There is little doubt that a portion of the United States is admirably adapted to the culture of the *wet* arums, such as the Taro of the Sandwich Islands, and the Kutchoo of India. Probably with little trouble the rice lands of Carolina, and swamps of Florida and Louisiana, might be made to produce immense crops. We do not know that any attempt has been made to acclimate either this or the more hardy species which flourish in higher latitudes, and on a comparatively dry soil.

We have in the northern States only one indigenous species of this food bearing family, seldom noticed except by the botanist, and esteemed only for its medicinal qualities. This is the *arum triphyllum*, the "wild turnip" or "Indian turnip" of popular parlance, and declared by De Candolle to be a specific for consumption. It has the family trait of thriving best in wet places, but we have often found fine specimens growing on rich uplands, among stumps, fences, and in moist, loamy soils.

No plant in the North American flora, exceeds this in elegance of form, but the dull colors of the blossoms only render them remarkable for their singularity. The *calla Ethiopica*, pet of our green-houses, and loveliest ornament of many a cottage window, is very much like the Taro, in its general appearance and manner of growth.

The precious stores treasured in the vegetable world for the use of man, are only beginning to be opened to him. We have lately seen how the wild cranberry, creeping about in swamps, over bogs and marshes at some seasons of the year almost inaccessible to human foot, has been *tamed* and trained, and made to flourish on hill sides, and to become one of the most productive and desirable of crops. Let equal pains be taken with those members of the arum family to which we have briefly alluded, and we doubt not a far more important result would ensue. Who knows but this very plant, fresh from the hand of Nature, may yet take the place of the potato, which in America and Europe is now so degenerated and diseased?

Preparing Osage Orange Seed.—Isaac L. Stanley, of Rensalaer, Indiana, says, to prepare this seed for planting, "Tie it up in a bag and sink it in running water three or four weeks; if you have no running water, deposit in any vessel filled with cold water every day to prevent fermentation." He thinks this is not generally known, and imparts it as having been proved to be a good plan, by two years' experience.

☞ The Wool Growers' Association of Western New York are to hold their second Annual Exhibition at Penn Yan, commencing on the 27th day of May next. A premium list of $1,000 has been made up, which will be increased if a state appropriation is obtained. [Weekly Visitor.

An English farmer says, "good sheds, dry beds, small yard boxes, regularity of feeding, small quantities at a time, are the great essentials in feeding all animals, and a strict attention to these principles would save an immense quantity of valuable food." [Weekly Visitor.

☞ In the Marine Court at New York on Tuesday, a man was mulcted $75 for malpractice in horse shoeing.

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WISCONSIN STATE AGRICULTURAL SOCIETY.

LIST OF PREMIUMS,

AND

REGULATIONS

FOR THE SIXTH ANNUAL

STATE FAIR,

TO BE HELD AT THE

CITY OF MILWAUKEE,

WEDNESDAY, THURSDAY & FRIDAY,

OCTOBER, 8th, 9th, 10th, 1856.

OFFICERS:

President, HARVEY DURKEE, Kenosha;
Vice Presidents, S. S. DAGGETT, Milwaukee,
MARTIN WEBSTER, Fox Lake,
A. D. KIRKPATRICK, Dayton, Green Co;
Treasurer, D. J. POWERS, Madison;
Secretary, GEO. O. TIFFANY, Madison;
Additional Members of the Executive Com.
A. F. CADY, Watertown;
ADAM E. RAY, Little Prairie;
GEO. H. WILLISTON, Janesville;
G. DUTCHER, Madison;
GEO. MESSERSMITH, Mineral Point;
B. R. HINKLEY, Summit;
GEO. H. SLAUGHTER, Madison.
Ex-Presidents, E. W. DRURY, Fond du Lac;
H. M. BILLINGS, Highland;
E. W. EDGERTON, Summit.

REGULATIONS FOR 1856.

The days selected for the Fair are Wednesday, Thursday and Friday, the 8th, 9th, and 10th days of October, A. D. 1856. Wednesday will be devoted to the reception and arrangement of articles and animals, and to the organization of the Committees of Judges; and also to the trial of harness horses on time, the place for which, the hour, and the regulations for this particular portion of the exhibition will be fully set forth in the bills of the day. Thursday the examination by the Judges will take place; and on Friday the annual address will be delivered, the award of premiums announced, &c., immediately after the address.

ADMISSION—TWENTY-FIVE CENTS.

Members of the Society, and all who may become such at the time of the Fair, by the payment of *one dollar* to the Secretary, will be furnished with a *Member's ticket*, which will admit them upon the grounds at all times during the continuance of the show. Children under ten years free.

Single tickets, twenty-five cents each, admitting one person, will be in readiness on Wednesday morning at the Treasurer's office on the show grounds.

Exhibitors will have a ticket to admit their hired man, but not transferable.

Private carriages, 50 cents. Each passenger therein, 25 cents.

EXHIBITORS.

Must have their articles and animals entered on the Secretary's books, on or before the morning of Wednesday, Oct. 8. After the books are closed on Wednesday morning, no entries will be received.

Articles and animals must be brought within the enclosure on Wednesday, Oct. 8, in order that they may be suitably arranged.

The Executive Committee do not wish to shut out any article or animal from competition for premiums, *but justice to the Officers and Judges, as well as those who comply with the rules of the Society, demands that these rules be strictly complied with.*

No entries will be received unless the requirements under the appropriate head in the premium list be first complied with.

Exhibitors who have several articles or animals designed for exhibition will save much inconvenience and trouble by having a list of their articles or animals made out in writing, which they can hand to the Clerk at the time of making the entry.

Entries *must* contain the exhibitors name and residence, and the *name* of the animal offered, or the description, and may be in this form:

Name and residence of Exhibitor.	Animal or Article entered.
J. WILSON, MADISON, Dane Co., Wisconsin,	1 Durham Bull, over four years old, named "Star." 1 Stallion, over four years old, named "Sir Henry." 1 Native Cow, red color, over four years old. 6 "South Down" Ewes, over two years old. 6 Hand Rakes.

Persons are desired to forward to the Secretary, previous to the 8th of October, their entries, (accompanied by the information required by the notes to the various numbers in the premium list), which will greatly facilitate the business of the show. For this purpose, the books of entry will be opened at Milwaukee, on the 25th day of September, at S. S. Dagget's office in Martin's Block.

GENERAL RULES.

The Judges *shall in all cases* withhold premiums where the animal is not worthy, even though there be no competition.

Should any individual enter an animal *in any other name* than that of the *bona fide owner*, the person making such entry shall not be allowed to receive any premium even though recommended by the Judges.

REMOVAL OF ARTICLES AND ANIMALS.

Articles and animals removed from the ground before the close of the exhibition, (except by permission of the President), can not receive a premium, even though awarded.

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INSTRUCTIONS FOR THE JUDGES, AND FOR THE SUPERINTENDENTS OF DIFFERENT DEPARTMENTS.

The Judges are requested to report themselves on their arrival to the Secretary, at the business office on the show grounds.

They are desired to meet at the Secretary's office, *Thursday morning, at nine o'clock*, when they will be presented with the Books of Entries, and proceed to decide upon the merits of the different articles and animals submitted to them, reference being made to the number affixed to each.

The Judges will report not only the animals entitled to premiums, but also those *next in merit* in each class to meet the contingency of any objection which may arise to the awards. Any animals which, in the opinion of the Judges, deserve a special commendation, will be so reported to the Executive Committee.

The Judges on animals will have regard to the symetry, early maturity, size, and general chacteristics of the breeds which they judge. They will make proper allowances for age, feeding and other circumstances on the character and condition of the animal. *They are expressly required not to give encouragement to over-fed animals*, especially in the breeding classes ; no premiums are to be awarded to bulls, cows, or heifers, which shall appear to have been fattened for the butcher ; the object of the Society being to have superior animals of this description for breeding purposes.

The Judges on stock, if not satisfied as to the regularity of the entries on their respective classes, will apply to the Secretary for information ; and should there be any doubt after examination, of their coming within the regulations, or if any animal is of such a character as not to be entitled to exhibition in competition, they will report the facts to the Secretary for the consideration of the Executive Committee, that such course may be adopted as the case may require.

No person will be allowed to interfere with the Judges during their adjudications, and any person, who by letter or otherwise, attempts an interference with the Judges will be excluded from competition.

The Judges are requested to hand in their reports to the Secretary on Thursday evening.

It is expected that the Superintendents will take the supervision of all articles in their respective departments, and see that all such articles are arranged, as near as may be, in numerical order, for their easy approach and examination.

The Judges, especially those on animals, will be expected to give the reasons for their decisions, embracing the valuable and desirable qualities of the animals and articles upon which premiums are awarded. And as one great object of the Society is to collect valuable information upon subjects connected with Agriculture, the several viewing Committees are requested to gather all the information possible from exhibitors, in their respective departments, and make their reports as full as circumstances will permit.

COMPENSATION TO JUDGES.

A reasonable compensation will be paid for the services of Judges in the different departments, to all those who report themselves at the place and hour specified, and perform the duties assigned them.

DISCRETIONARY PREMIUMS.

No viewing Committee, with the exception of the Miscellaneous and Discretionary, shall award any Discretionary Premiums, *without the previous permission of the Executive Committee expressly given through the Secretary*. Whenever articles of merit, superior in their character, are presented, and which are entitled to special commendation, the Judges are requested to notice them particularly, and refer them to the consideration of the Executive Committee.

The Judges on *Discretionary Premiums* in making their awards, will recommend Diplomas, Silver Medals, Certificates, and Transactions or money as the merits of the articles may require; and in *all cases the Diploma of the Society to be awarded* ONLY *as evidence of* SUPERIOR MERIT.

COMPETITION FROM WITHOUT THE STATE.

The premiums for Agricultural Implements Manufactures other than domestic, Machinery, Miscellaneous and Discretionary articles, will be open to competition from without the State.

ANNUAL ADDRESS.

The annual address before the Society will be pronounced on Friday afternoon, at 2 o'clock, under the Society's large tent on the grounds.

AWARD AND PAYMENT OF PREMIUMS.

The award of premiums will be read by the Secretary immediately after the close of the address, after which the Treasurer will pay them at the business office till the close of the day, and on Saturday at the rooms of the Society. The reports of the Judges will be published in the Transactions of the Society.

It is specially desired that the premiums be called for at the Fair. All *cash premiums* will be paid and delivered at the Fair if called for. The Medals and Diplomas will be delivered at the Society's Rooms, at Madison, as soon as they can be engraved or prepared, and will be forwarded as directed to the person entitled to them.

Persons to whom premiums may be awarded, are informed that unless they call for their premiums *at the Fair*, application must

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be made at the rooms of the Society, where the book of awards is to be found.

The Secretary will forward any premiums that may not be received at the Fair, in such manner as may be directed by the person entitled to the same.

NOTICE TO EXHIBITORS.

The Executive Committee will take every precaution in their power for the safe preservation of stock and articles on exhibition *after* their arrival and arrangement upon the grounds, but will not be responsible for any loss or damage that may occur. They desire exhibitors to give attention to their articles, and at the close of the Fair, to attend to their removal.

Exhibitors must see *to the delivery* of their articles upon the grounds, and *to the Superintendent of the appropriate department*, and the Society cannot in any case make provision for their transportation, or be subjected to any expense therefor, either in their delivery at, or return from the grounds; but all expenses connected therewith, must, as heretofore, *be provided by the exhibitor.*

FORAGE FOR STOCK.

For the convenience of exhibitors, forage, consisting of hay, oats, corn, and straw for litter, with water, will be supplied upon the grounds without charge, so that animals on their arrival may be driven to the show grounds, and need not be removed till the exhibition is closed. Grain will also be furnished to swine and poultry. The Executive Committee trust that this arrangement will obviate any objection which may be made by the exhibitors who have been subjected to more or less inconvenience in procuring feed for their stock, and to *no inconsiderable expense.* Forage will be furnished to all stock kept upon the grounds, and no other.

COMMITTEE OF ARRANGEMENTS FOR THE YEAR.

Samuel S. Daggett, B. R. Hinkley, and G. O. Tiffany.

GENERAL SUPERINTENDENT OF GROUNDS,

Harvey Durkee.

SUPERINTENDENTS.

Cattle Department—William A. White.
Horse Department—B. R. Hinkley.
Sheep Department—E. M. Danforth.
Swine and Poultry—A. D. Kirkpatrick.
Farming Implements and Machinery—G. H. Williston.
Dairy Hall—M. L. Burdick.
Floral Hall and Fruit Department—H. J. Starin.
Manufacturer's Hall—S. S. Daggett.
Miscellaneous and Discretionary Department—Adam E. Ray.
Gate Superintendent—A. F. Cady.
Hall of Fine Arts—R. N. Messenger.

STATE AGRICULTURAL ROOMS.

The Society has spacious rooms in Madison. Every information requested in relation to the premiums, or on business connected with the objects of the Society, will be furnished on application to the Secretary, either personally or by letter. Farmers are desired to communicate freely with the Secretary, and any aid he can render them in procuring choice seeds, valuable improvements, or stock, will be most cheerfully performed. It is desired to open a correspondence with all who may wish to do so, with a view to aid in forwarding the Agricultural, Horticultural and Mechanical pursuits.

TRANSPORTATION.

Arrangements have been made with the different Rail Road Companies by which passengers will be carried to Milwaukee and back during the week of the Fair at half price, and articles and animals for exhibition *free.*

STATE AGRICULTURAL ROOMS,
MADISON, March 25, 1856.

LIST OF PREMIUMS,
FOR THE

SIXTH ANNUAL FAIR.

In forming a Premium List for the Annual Fair of 1856, the Executive Committee have varied from the custom of former years, in making the premiums payable in cash. The amount in most cases is also much larger than in former years. Some changes have also been made in the manner of judging of the CAPABILITY of some kinds of stock, which it is believed will fully meet the approbation of those most deeply interested. No animal that has taken the first cash premium at any former fair can again receive a cash premium but will receive the diploma of the society, if the best on exhibition.

CLASS A.

THOROUGH BRED CATTLE.

Competitors in all cases to file with the secretary at the time of making the entry, evidence of the purity of the blood, with statement of pedigree, &c.

JUDGES—Z. P. BURDICK, Chairman, Janesville; HARMAN MARSH, Kenosha; JOHN COCHRAN, Waupun.

No. 1. SHORT HORNS.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	5
2d do	3
Best Bull do	5
2d do	3

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No. 2. Devons.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	5
2d do	3
Best Bull do	5
2d do	3

No. 3. Herefords.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	5
2d do	3
Best Bull Calf,	5
2d do	3

No. 4. Ayrshires.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	5
2d do	3
Best Bull Calf,	5
2d do	3

No. 5. Alderney.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do de	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	$5
2d do	3
Best Bull Calf,	5
2d do	3

No. 6. Crosses of Blood Cattle.

Best Bull 3 years old and over,	$15
2d do do	10
3d do do	5
Best Bull 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Bull 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Cow 3 years old and over,	15
2d do do	10
3d do do	5
Best Heifer 2 years old and under 3,	10
2d do do	7
3d do do	5
Best Heifer 1 year old and under 2,	7
2d do do	5
3d do do	3
Best Heifer Calf,	5
2d do	3
Best Bull Calf,	5
2d do	3

NATIVE AND GRADE CATTLE, WORKING OXEN, AND FAT STOCK.

Judges—Joseph Goodrich, Ch'n, Milton; Hiram Cross, La Grange; Thomas P. Turner, Palmyra.

No. 7. Native and Grade.

Best Native or Grade Cow 3 years old and over,	$10
2d do do do	7
3d do do do	5
Best Heifer 2 years old and under 3,	5
2d do do	3

No. 8. Working Oxen.

Best Yoke,	$10
2d do	7
3d do	5
Best yoke 3 year old Steers,	10
2d do	5
Best 2 year old Steers,	5
2d do	3
Best 1 year old Steers,	3
2d do	2

No. 9. Fat Stock.

Best pair fat oxen 4 years old and over,	$10
2d do do do	5
Best lot grass fed Cattle not less than 4 in number,	20

For the Best Thorough-Bred Foreign Stock discretionary premiums will be awarded.

HORSES.

No. 10. Trotting and Road Horses.

Judges—E. B. Wolcott, Ch'n, Milwaukee; Geo. Gates, Madison; W. H. Howard, Beloit.

For the Best Trotting Stallion which has been kept as a *Stock Horse within this State* the past season, a premium of	$100
2d do	50
3d do	25

Owners of horses contending for this premium to furnish the Judges with their season book, or other satisfactory evidence that the horse has been kept as a stock horse, and has served not less than 15 mares; owners not complying with the above requisition will not be allowed to contend for this premium. All horses entered for this premium to pay an entrance fee of $10, and to trot one mile in harness, alone; to be timed by the Judges and their assistant time-keepers.

For the best Trotting Stallion, five years old or under, the spring of 1856,	$25
2d do	15
3d do	10

Entrance fee, $2.50.

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Owners of all stallions contending for either of the above premiums to furnish the pedigree, age; color, size, (and weight if possible,) of their respective horses at the time of paying their entrance fee.

For the best pair Matched Trotting Horses or Mares, owned in the State, ... $50
2d do 25
3d do 15

Entrance fee, $5.00.

For the best Single Trotting Gelding or Mare owned in the State, ... $25
2d do 15
3d do 10

Entrance fee, $2.50.

Stallions to go Thursday, 2 P. M.—Geldings, Mares and Matched Horses, 9 A. M., Friday.

☞ *All Animals offered for exhibition, or contending for any of the premiums of the society, must be the bona-fide property of the exhibitor — otherwise the premium will be withheld.*

Horses entered to go as single or in double teams will not be allowed to change after they are entered.

All Horses competing for premiums under the class of Trotting and Road Horses must be on the ground designated by the Judges for the trial of speed by 10 o'clock A. M., on Thursday, the 9th of October; and all entries must be made the day previous, and sooner if possible. The Judges will select three or more competent Time-Keepers as assistants, and every precaution will be taken to ensure perfect accuracy, and the time of the different horses will be published, together with pedigree, &c.

No. 11. Blood Horses.

Judges—Andrew Proudfit, Ch'n, Madison; Wm. Hobkirk, Waupun; Stephen Ives, Racine.

Best Blood Stallion 4 years old and over, having been kept for stock the past season in this State, ... $50
2d do do do 25

Pedigree and satisfactory evidence to be furnished the Judges.

No. 12. Morgan Horses.

For the best Stallion kept for stock the past season within this State, 4 years old and over, ... $20
2d do do do 15
Best Stallion 3 years old and under 4, ... 10
2d do do 5

Black Hawk.

For the best Stallion kept for stock the past season within this state, 4 years old and over, ... $20
2d do do do 15
Best Stallion 3 years old and under 4, ... 10
2d do do do 5

No. 13. Carriage Horses.

Best Pair Matched Carriage Horses, ... $25
2d do do 15
Best Single Horse, ... 10
2d do 5

To be exhibited in harness.

Horses for All Work.

For the best Stallion kept for stock the past season within this State, 4 years old and over, ... $20
2d do do do 15
Best Mare 4 years old and over, ... 10
2d do do 5
Best pair Matched Horses for all work, ... 15
2d do do 10

No. 14. Mares and Colts.

Judges—H. M. Billings, Ch'n, Highland; Wm. Kissan, Berlin; Jas. Clark, Summit.

Best Brood Mare 4 years old and over, with foal at foot $10
2d do do do do 5
Best Mare Colt 3 years old and under 4, ... 10
2d do do do 5
Best Mare Colt 2 years old and under 3, ... 8
2d do do do 5
Best Mare Colt 1 year old and under 2, ... 5
2d do do do 3
Best Gelding Colt 3 years old and under 4, ... 10
2d do do do 5
Best Gelding Colt 2 years old and under 3, ... 8
2d do do do 5
Best Horse Colt 1 year old and under 2, ... 5
2d do do do 3
To the owner of any Stallion exhibiting 7 of the best Colts, the progeny of said Horse, from 1 to 3 years old, a premium of $25

No. 15. Jacks and Mules.

Best Jack, ... $10
2d do 5
Best Jenny, ... 10
2d do 5
Best Pair of Work Mules, ... 10
2d do do 5
Best Single Mule, ... 5
2d do 3

SHEEP.

All Sheep must be sheared within the season, and a sample of the Wool filed at the time of entry.

No. 16. Long Wool, Middle Wool, Leicester and their Grades.

Judges — B. Ferguson, Chairman, Fox Lake; Joseph Spaulding, Janesville; Fred. Layton, Milwaukee.

Best Buck 2 years old and over, ... $10
2d do do 7
3d do do 5
Best Buck 1 year old and under 2, ... 6
2d do do 5
3d do do 3
Best pen of 3 Ewes 2 years old and over, ... 10
2d do do do 7
3d do do do 5
Best pen of 3 Ewes, 1 year old and under 2 7
2d do do do 5
3d do do do 3

All sheep must be shorn during the season.

No. 17. French Sheep and their Grades.

Judges—Seymour Brooks, Chairman, East Troy; Horatio Hill, Milwaukee; J. E. Dodge, Potosi.

Best Buck 2 years old and over, ... $10
2d do do 7
3d do do 5
Best Buck 1 year old and under 2, ... 7
2d do do 5
3d do do 3
Best pen of 3 buck lambs, ... 5
2d do do 3
3d do do 2
Best pen of 3 Ewes 2 years and over, ... 10
2d do do 7
3d do do 5
Best pen of 3 Ewes 1 year and under 2, ... 7
2d do do do 5
3d do do do 3
Best pen of 3 Ewe lambs, ... 5
2d do do 3
3d do do 2

All Sheep must be in condition as above.

No. 18. Spanish Merinos and their Grades.

Best Buck 2 years old and over, ... $10
2d do do 7
3d do do 5
Best Buck 1 year old and under 2 7
2d do do 5
3d do do 3

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Best pen of 3 Buck Lambs, ... 5
2d do do 3
3d do do 2
Best pen of 3 Ewes 2 years and over, ... 10
2d do do do 7
3d do do do 5
Best pen of 3 Ewes, 1 year and under 2 7
2d do do do 5
3d do do do 3
Best pen of 3 Ewe Lambs, ... 5
2d do do 3
3d do do 2

No. 19. SAXONS AND GRADES.

Best buck 2 years old and over, ... $10
2d do do 7
3d do do 5
Best Buck 1 year old and under 2, ... 7
2d do do 5
3d do do 3
Best pen of three buck lambs, ... 5
2d do do 3
3d do do 2
Best pen 3 ewes, 2 years old and over, ... 10
2d do do 7
3d do do 5
Best pen 3 ewes, 1 year old and under 2, ... 7
2d do do do 5
3d do do do 3
Best pen 3 ewe lambs 5
2d do 3
3d do 2

No. 20. SILESIAN SHEEP.

Best buck, ... $10
2d do 7
3d do 5
Best pen 3 ewes, ... 7
2d do 5
3d do 3

No. 21. FAT SHEEP.

Best pen of 3 fat Sheep, ... $10
2d do 5

NO. 22. SWINE.

LARGE BREED OF SWINE—LEICESTER, WOBURN, BEDFORD OR SUSSEX.

JUDGES—A. H. ATWATER, Chairman, Oak Grove; H. H. JOHNSON, Kenosha; S. B. POTTER, Kenosha.

Best Boar, either the above breeds, 2 years old or over, $10
2d do do do do 7
3d do do do do 5
Best Boar, 1 year old and under 2, ... 7
2d do do 5
3d do do 3
Best breeding sow, 2 years and over, ... 10
2d do do 7
3d do do 5
Best breeding Sow, with litter of Pigs, not less than 6, under 3 months old, ... 10
2d do 5

No. 23. POULTRY.

JUDGES—C. S. OSWIN, Chairman, Middleton; CHARLES SMITH, Waupun; L. KENNEDY, Milwaukee.

Best and greatest variety Poultry owned by exhibitor, $ 5
Best lot Shanghai Fowls, not less than 3, 1 cock, 2 hens 2
Best lot Chittagong Fowls, do do 2
Best lot Cochin China Fowls, do do 2
Best lot Dorkings, do do 2
Best lot Bramah Pootras, do do 2
Best lot Bolton Greys, do do 2
Best lot Java, do do 2
Best lot Spangled Hamburg, do do 2
Best lot Black Spanish, do do 2
Best lot Polands, do do 2
Best lot Bantams, do do 2
Best lot Turkeys, do do 2
Best lot Ducks, do do 2
Best lot Guinea Fowls, do do 2
Best lot Geese, do do 2
Best lot Pea Fowls, do do 2
Best lot Game Fowls, do do 2

CLASS B.

NO. 24. FARM IMPLEMENTS.

JUDGES—S. S. CASE, Chairman, Waukesha; S. B. NEWCOMB, Whitewater; J. A. FLETCHER, Johnstown.

Best farm wagon, ... 5
Best fanning mill, ... dip. and 5
Best straw cutter, horse power, ... 5
Best straw cutter, hand power, ... 3
Best corn and cob crusher, ... 3
Best flax and hemp dresser, ... 5
Best horse cart, ... 5
Best ox cart, ... 5
Best horse rake, ... 2
Best ox yoke, ... 2
Best roller for general use, ... 5
Best clod crusher and roller combined, ... 5
Best wool press, ... 2
Best clover machine, huller and separator, ... 5
Best wagon harness, ... 5
Best carriage harness, double, ... 10
Best carriage harness, single, ... 5
Best saddle, ... 2
Best churn, ... 2
Best cheese press, ... 2
Best breaking plow, ... 5
2d do 3
Best sod Plow, ... 5
2d do 3
Best stubble Plow, cast steel, ... 5
2d do do 3
Best corn Plow, ... 3
2d do 2
Best grain cradle, ... 2
Best six hand rakes, ... 1
Best six hay forks, ... 2
Best six grass scythes, ... 2
Best six cradle scythes, ... 2
Best six manure forks, ... 2
Best lot of grain measures, ... 1
Best dozen wire brooms, ... 1
Best dozen Shaker, or twine-tied brooms, ... 1
Best ozier work, ... 5
Best sheep rack, ... 3
Best nest tubs, ... 3
Best nest pails, ... 1

No. 25. IMPLEMENTS, No. 2.

Best horse power for general purposes, sweep, dip. and $5
Best horse power for general purposes, tread, dip, and 5
Best thrasher and separator 5
Best seed planter, ... 3
Best grain drill, ... 3
Best corn sheller, horse power, ... 5
Best corn sheller, hand power 3
Best vegetable cutter, ... 3
Best portable saw mill, ... diploma and 10
Best portable grist mill, ... 5
Best pump for farm use, ... 3
Best apparatus for raising water, ... diploma and 5
Best churning machine 3
Best and most numerous collection of agricultural implements, ... 15
Second do, ... 10
Best and most numerous collection of agricultural implements manufactured in the State of Wisconsin by or under the supervision of the exhibitor, materials, workmanship, utility, durability and prices to be considered in both cases, ... 15
Second do, ... 10
Best reaper, ... diploma.
Best mower, ... diploma.
Best reaper and mower combined, ... diploma.

In these last cases, a catalogue of the implements, and the price of each must be given, and a certificate as to the manufacture.

Persons presenting agricultural implements or articles of mechanical ingenuity and utility, are requested to furnish the Secretary with a particular description of the article, the price, and place where it can be procured, which will be published for the benefit of the manufacturers and purchasers.

NO. 26. DAIRY.

JUDGES—F. D. WELD, Chairman, Greenfield; GEO. C. GUNN, Beaver Dam; L. J. BROWN, Fond du Lac.

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Butter.

Best 25 lbs butter made in June, set of spoons worth	$10
2d do do do	7
3d do do do	5
Best 25 lbs butter made at any time do	7
2d do do do	5
3d do do do	3

Competitors for premiums must state in writing where the butter was made; the number of cows kept on the farm; the mode of keeping; the treatment of the cream and milk before churning, winter and summer; the mode of freeing the butter from the milk; the quantity and kind of salt used; whether saltpeter or other substance has been used; also, whether in the use of any variety of salt, injurious results have occurred, and if so, state variety, and where manufactured; and make certificate of the process.

Butter offered for premiums must be presented in butter tubs, jars or firkins.

Cheese.

Best three cheeses,	$10
2d do	7
3d do	5
Best single cheese,	3
2d do	1

Those who present cheese for the premiums offered, must state, in writing, the time it was made; the number of cows kept; whether the cheese was made from one, two or more milkings; whether any addition is made of cream, the quantity of rennet used; the mode of preparing it; the mode of pressure; and the treatment of cheese afterwards, and the kind of salt used.

No. 27. Sugar and Honey.

Best 25 pounds of maple sugar,	$ 3
2d do do	2

The proeess of manufacturing and clarifying must accompany the sample offered, and must be filed at the time of making the entry.

Best 10 lbs of honey,	3
2d do	2
Best bee hive,	2

No. 28. Farm and Garden Products.

Judges—A. G. Hanford, Chairman, Waukesha; S. L. Sheldon, Burke, Dane Co.; Milo Jones, Fort Atkinson.

Best sample winter wheat, not less than one bushel,	$ 3
2d do do do	2
Best sample spring wheat, not less than one bushel,	3
2d do do do	2
Best sample rye, not less than one bushel,	2
2d do do do	1
Best sample oats, not less than one bushel,	2
2d do do do	1
Best sample barley, not less than one bushel,	2
2d do do do	1
Best sample buckwheat, not less than one bushel,	2
2d do do do	1
Best sample flax seed, not less than one bushel,	2
2d do do do	1
Best sample hops, not less than 25 lbs,	3
2d do do do	2
Best sample timothy, not less than one bushel,	3
2d do do do	2
Best sample clover seed, not less than one bushel,	3
2d do do do	2
Best sample millet, not less than one bushel,	2
2d do do do	1
Best sample peas, not less than one bushel,	2
2d do do do	1
Best sample beans, not less than one bushel,	2
2d do do do	1
Best sample broom corn,	$ 2
Best and greatest variety of potatoes,	5
2d do do	3
Best and greatest variety of garden vegetables,	7
2d do do	5
Best and greatest variety of garden peas,	2
2d do do	1
Best and greatest varirty of squashes,	2
2d do do	1
Best and greatest variety of pumpkins,	2
2d do do	1
Best and greatest variety of seed corn,	2
Best twelve ears of seed corn, one variety,	1
Best 12 carrots,	1
Best 12 beets,	1
Best 3 heads cabbage,	1
Best 3 cauliflowers,	1
Best 6 egg plants,	1
Best peck sweet potatoes,	1
Best peck onions,	1
Best half peck peppers,	1
Best bushel rutabagas,	1
Best sample of cucumber pickles,	1
Best sample of mixed pickles,	1

No. 29. Field Crops.

The Executive Committee will award the premiums under this head at their meeting in December.

Best one acre winter wheat,	$ 7
2d do do	5
Best one acre spring wheat,	7
2d do do	5
Best one acre oats,	7
2d do	5
Best one acre corn,	7
2d do	5
Best one acre barley,	7
2d do	5
Best acre potatoes,	7
2d do	5
Best eighth acre carrots,	7
2d do	5
Best one acre hops,	7
2d do	5
Best one acre timothy seed,	7
2d do	5
Best one acre clover seed,	7
2d do	5

Accompanying the above, a detailed description of the soil, manure, mode of culture, and expense, must be presented in writing. The land must be accurately measured; also the grain and roots. Proof of the accuracy of the statement must be presented to the satisfaction of the awarding committee.

Competitors for any of the above premiums must file with the Secretary, by the 15th of June, notice that they will enter for competition, and specify the crop or crops.

CLASS C.

Judges—Dennis Worthington, Chairman, Summit; Mrs. James Davis, Waukesha; Mrs. H. J. Starin, Whitewater.

NO. 30. DOMESTIC MANUFACTURES.

Best 12 skeins of sewing silk,	$ 2
Best specimen of manufactured silk, woven into cloth or ribbons, not less than 5 yards,	5
Best pair of woolen blankets,	4
2d do	2
Best ten yards of flannel,	4
2d do	2
Best ten yards of woolen cloth,	4
2d do	2
Best eighteen yards of woolen carpet,	4
2d do do	2
Best hearth rug,	4
2d do	2
Best ten yards rag carpet,	4
2d do	2
Best pair woolen stockings,	2
2d do	1

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Best pair woolen mittins,	$ 2
2d do	1
Best ten knots woolen yarn,	2
2d do	1
Best ten yards linen,	4
2d do	2
Best ten yards linen diaper,	4
2d do	2
Best ten yards tow cloth,	4
2d do	2
Best pair cotton stockings,	2
2d do	1
Best pair of linen stockings	2
2d do	1
Best ℔ of linen sewing thread,	2

Articles in this class to be manufactured within the year; and in all cases the exhibitors must furnish evidence that the articles are so manufactured. And no article manufactured in factories, or out of the family, will be received in this or either of the classes of domestic goods. Exhibitors must accompany their articles with a certificate of manufacture in the family, and within the year. Discretionary premiums will be awarded on articles of merit not included in the above.

No. 31. Needle, Shell and Wax Work.

Best Bay State shawl,	$ 5
Best long shawl,	3
Best ottoman cover,	3
2d do	2
Best table cover,	5
2d do	3
Best variety of worsted work,	3
2d do do	2
Best fancy work with needle,	3
2d do do	2
Best worked cushion and back,	3
2d do do	2
Best worked collar,	2
2d do	1
Best worked handkerchief,	2
2d do	1
Best patch quilt,	3
2d do	2
Best white quilt,	1
Best lamp mat,	2
2d do	1
Best piano spread,	5
2d do	3
Best pair wrought slippers,	2
2d do	1
Best knit tidy,	2
2d do	1
Best crotchet tidy,	1
Best exhibition of wax flowers,	3
2d do do	2
Best specimen of artificial flowers other than wax,	3
2d do do do	2

Lace Work and Flowers.

Best exhibition of thread lace,	$ 3
2d do do	2
Best floral ornament,	10
2d do	5

The articles in this department must be manufactured by the exhibitors and within the year, and a certificate to that effect filed at the time of making the entry.

No. 32. Manufactures other than Domestic.

Judges—W. H. Waterman, Chairman, Racine; Rufus Cheney, Whitewater; G. M. Harris, Madison.

Best piece broadcloth, not less than 10 yards,	dip. and	$ 5
Best piece woolen carpet,	do dip. and	5
Best piece satinet,	do dip. and	5
Best piece blanketing,	do dip. and	5
Best piece flannel,	do dip. and	

The articles in this department must be manufactured in the State, and within the present year, evidence of which must be filed at the time of making the entry.

No. 33. Paintings, Ambrotypes, Daguerreotypes and Photographs.

Judges—Brooks, Chairman, Milwaukee; Lund, Milwaukee; Bronson, Madison.

Best specimen of paintings in oils, dip. and	$ 5
2d do do	5
Best specimen of painting in water colors,	5
2d do do	3
Best Crayon drawing,	5
2d do	3
Best exhibition of daguerreotypes,	5
2d do do	3
Best exhibition of ambrotypes,	5
2d do do	3
Best exhibition of photographs,	5
do do do	3

No. 34. Book Binding and Printing.

Judges—C. L. Sholes, Chairman, Kenosha; Charles Wells, Berlin; Charles Holt, Janesville.

Best specimen of card printing,	$ 5
Best specimen of book printing,	5
2d do do	3
Best exhibition of book binding,	5
2d do do	3

No. 35. Stoves, Cutlery and Silver Ware.

Judges—Frederick Wardner, Chairman, Milwaukee; F. G. Tibbits, Madison; E. Bain, Kenosha.

Best cooking stove,	$ 5
2d do	3
Best ornamental parlor stove,	5
2d do	3
Best hall stove,	5
2d do	3
Best sample of hollow ware,	3
Best exhibition of table cutlery,	3
Best exhibition of pocket cutlery,	5
2d do do	3
Best exhibition of silver ware,	10
2d do do	7
Best exhibition of brittania and argentine ware,	5
2d do do do	3

No. 36. Miscellaneous and Discretionary Department.

Judges—I. A. Lapham, Chairman, Milwaukee; Alonzo Wing, Jefferson; P. R. Hoy, Racine.

For improvements in machinery useful to the farmer, and having valuable properties, and not included under any head of any of the regular premiums, discretionary premiums will be awarded.

Under this general head, premiums will be awarded upon articles of ingenuity, usefulness and merit, which may be exhibited, which are not provided for in the foregoing list of premiums, among which may be named:

Agricultural implements or machinery for agricultural purposes not heretofore enumerated.

Machinery of metal composition for general uses.

Articles constructed of wood.

NO. 37. FRUITS.

Judges—A. L. Castleman, Chairman,

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Delafield; O. S. Rathbone, Brookfield; H. J. Starin, Whitewater.

Competitors to name and label all fruits.

Apples.

Best and greatest variety of apples, not less than three specimens of each,	$10
2d do	7
3d do	5
Best ten varieties,	5
2d do	3
3d do	2
Best five varieties,	3
2d do	2

Fall and Winter Apples.

Best show of autumn apples,	10
2d do	7
3d do	5
Best show of winter apples,	10
2d do	7
3d do	5

Pears.

Best and largest variety of pears,	7
2d do do	5
3d do do	3
Best two varieties of pears,	5
2d do	3
3d do	2

Grapes.

Best and greatest variety of grapes, not less than five clusters each,	5
2d do do do	3
3d do do do	2

Plums.

Best and greatest variety plums, not less than 5 each,	7
2d do do do do	5
3d do do do do	3

Quinces.

Best show of quinces,	7
2d do	5
3d do	3
Best two specimens of one or more varieties,	2

Peaches.

Best show of peaches,	7
2d do	5
3d do	3
Best single variety, three specimens each,	3
2d do do	2
3d do do	1

Watermelons.

Best show of watermelons,	3
2d do	2
3d do	1

Preserves.

Best show preserved fruits, not less than 1 quart each,	5
2d do do do	3
3d do do do	2

Death of a Canary Bird by Fright.—A canary bird was singing in a cage which was hanging inside of a window, at the residence of Ebenezer Roger, Esq., of Beverly, last week, when a sparrow hawk pounced at him from without, striking the glass with great force but not breaking it. The bird was so frightened that it fluttered two or three times round the cage, and dropped dead. [Boston Traveller.

Well Taught Children!—Parents should recollect that children are little better than pillows—yielding to the heads that recline upon them either comfort and rest, or uneasiness and sleepless anxiety, according to the way in which they have been filled.

THE BENEFITS OF GEOLOGICAL SURVEYS TO THE FARMER.

Professor G. C. Swallow, in his annual report of the Geological Survey of Missouri, a work which is very thorough, and which reflects much credit on the people of that state, makes some very judicious remarks, showing what advantage their surveys are to the farming interests of our country.

We propose to make a few extracts:

"How shall we preserve and increase the fertility of our soils? has become the great question in our political economy. Agricultural science alone can answer this question; and the Geological survey is the best possible arrangement to ascertain the facts and principles to be considered and adopted. Let us make careful examinations of the subsoils, and underlaying strata; let us thoroughly analyse the soils; let us examine all the mineral deposits suited to sustain or improve the fertility of their soils, such as humas, green sand, and marl, and we shall be able to give such a report, as would enable every farmer, not only to preserve but even to increase the productive energies of his lands. This will greatly increase the profits of agriculture, and preserve and increase the intrinsic value of cultivated lands. Should we be able to make such improvements as would increase the products of cultivated land of the state one dollar per acre, *as many of our farmers have done the two past years*, that would give us an annual return of $3,000,000, equal in all beneficial results to individuals and the state, to an investment of fifty millions of dollars in new farms."

New York is an old state; large portions of her soil were much exhausted; and she had comparatively little new land to come into cultivation; so that nearly all increase of products must arise from improved culture. She spent $130,000 in a most thorough survey. The reports, which are an imperishable monument to her far-sighted liberality, gave every department of business a fresh impulse. Her agriculturalists commenced an improved system of culture, which has resulted in increasing the annual products of her farms some $50,000,000. Provided that only one-tenth of this increase was the result of the Geological Survey, still, it has annually repaid the whole outlay for

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the most liberal survey ever made in this country, with an ample margin left. We have proof of similar results in Massachusetts, North and South Carolina, and other States.

But there are more general advantages to the farmer from this survey. If properly conducted it cannot fail to develope the mineral resources of our state, and place our mining interests on a more permanent basis, by inviting capital, and by securing systematic and profitable operations.

It will increase our mechanical and manufacturing interests, by pointing out the raw materials and the facilities for converting them into articles of domestic and foreign trade.

Agriculture will be advanced by investigating the structure and the chemical properties of the soils, as the results will enable us to determine the modes of culture necessary to sustain and even increase their productive energies.

Commerce will also receive a new impulse from the increased products of the farm, the mine, and the workshop.

Should the survey be made with sufficient minuteness to point out the soils of each township, the facilities for settling, and the great prosperity of our agricultural communities, the reports would attract thousands of those who are yearly seeking homes in this great valley.

The development of the mineral and agricultural resources, will so enhance the value of land in the state, as to make an aggregate increase of a vast amount.

The survey will in no small degree promote the interests of our rail roads, by shewing the existance of vast mineral deposits along their lines, awaiting the means of transportation to some good market.

What Missouri has done and is doing, let us hope all the other western states will do. They will certainly find it much to their interest to have their resources ascertained and made known to the world through the agency of Geological Surveys."

☞ An imaginative Irishman gave utterance to this lamentation: 'I returned to the halls of my father by night, I found them in ruins! I cried aloud, 'My Fathers, where are they? and echo responded, 'Is that you Patrick M'Carthy?

For the Farmer.

HOW TO ADVANCE OUR STATE.

Messrs. Editors—We all feel more or less ambition to have our young and favored State of Wisconsin appreciated and honorably distinguished abroad, in the estimation of the older states—from which most of us emigrated, for its intelligence, improvement, and wealth; and this desire is not less lively among farmers, than other classes of our population; it is as eminently our interest as it is that of any other class.

The advancing intelligence and prosperity of Wisconsin in the estimation of this and other nations is eminently to be desired by us all, for two principal reasons, besides other minor ones. First—it will proportionably increase our individual wealth and enjoyments, and also, the honor of those who intelligently contribute to promote the honorable character of the State; Secondly—the more we increase the profitable growth of the State, and extend the knowledge of the fact abroad, the more shall we induce the refined and wealthy of our own friends and acquaintances to come and reside among us, whose society and means will tend to promote our own happiness.

And these ends cannot be better attained —cannot be so surely attained—in any other manner as by convincing other portions of the country that our State contains a wise and prosperous yeomanry—an intelligent, thrifty community of farmers.

We have no doubt—and believe there is no reason for doubt—that our State possesses a class of farmers whose probity and understanding will compare favorably with that of any state in the Union; for a moment's reflection on the subject, will convince us that it is not, generally, the least substantial and enterprising portion of the population who have left the older states to remove to the new ones—energy was necessary for the task in earlier times.

Now, we say to the Farmers, let this interesting and important fact be evinced by yourselves in coming forward nobly to subscribe and *write* for the Wisconsin Farmer, which you are all more or less able to do—as is the habit in the more eastern states.—Let this wise practice be generally adopted through the state, and what a vast volume of interesting and varied facts, arguments

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and suggestions would be presented, and what a convincing and commanding reputation would it give our state abroad—to behold the vast body of thinking farmers.

Wisconsin is pre-eminently an Agricultural state, and is capable of becoming as wealthy as any one of the western sisterhood. By the late census and other data, it may be safe and fair to calculate that there are about one and a half millions acres of cultivated land in the state; which as now occupied constitutes about 50,000 farms, more or less tilled.

This number of farms will require at least 50,000 farmers, who are proprietors or managers, besides the hired workmen. At least, one half or three fourths of these ought to subscribe and pay for the *Farmer*, and most of them also write for it, giving statements of the operations and results in their own localities—which could be compared by each reader and writer with his own operations; and thus extensive instruction and benefits accrue to all; and I am satisfied, that with a little thought devoted to the matter, the farmers of the state will see very readily, that they *ought, can, and will*, furnish to the *Farmer* that number—say 20,000 to 25,000 —of *paying and writing* subscribers before the present year expires. This result is perfectly reasonable and practicable; and when accomplished would exhibit a nobler patronage than is extended by any other state to its agricultural newspaper, and would effect more for the glory and honor of the state than any other one enterprize which a single class can do; and in proportion as the Journal is rendered efficient by such support will its usefulness and ability for doing good be increased among us.

Besides this one and a half million acres of improved land, there is within the area of the state above 31,000,000 acres of land, of which at least 20,000,000 is suitable to be converted into productive and pleasant farms—enough land to make two million additional farms—waiting for occupants; and may may be purchased at low prices, ranging from $1,25 to $10 per acre.

In this connection, it may not be out of place to state a few important relevent facts, from the last U. S. census reports, which is an impartial reporter, of course, and may be relied upon. In a table showing the relative healthiness and deaths of the several states, we find—that the number of deaths in ratio to the number of living, is—in the state of Maine, 1 to 77; Vermont, 1 to 100; Connecticut 1 to 64; Illinois, 1 to 73; Iowa 1 to 94; and Wisconsin, 1 to 105; which shows the least number of deaths in proportion to the whole population of any state in the Union. This certainly is a fact worthy of the first consideration with eastern farmers who contemplate moving west. Health is the first consideration.

In regard to the value of improved lands in the new states, the same report shows that the average value is—in Illinois, $7,99; in Iowa, $6,09; in Texas, $1,09; and in Wisconsin, it is $9,58—a very fair show for a young state.

And by looking carefully through the tables we find that the average value of products per acre, exceeds that of the other states named, in about the same proportion that the land exceeds that per acre in value. Read the documents—then think and write —and operate. Yours, D. S. C.

For the Farmer.

AGRICULTURAL SOCIETIES.

Messrs. Editors—It seems that in every stage of human life, man needs something fitting as a recreation, as a stimulant, a something to amuse and encourage him, while making moves for reformation and improvement in his peculiar sphere of action. The child must have its toys and plays adapted to *its* tender age. The school boy, too, requires his joyous sports; hilarity and glee must be mingled with his amusements, to give a healthy tone to his physical being.—If his exercises be of an inoffensive character and properly conducted, they may be the means of preparing his mind for rigid strides in intellectual attainments. And the young man who has passed his days of school books and *formal* study, (though still a scholar), and left the old school room, around and in which happy hours of pleasure glided swiftly by, and perhaps distant from the many smiling faces of the old home,—although his boyish days are past, the family circle broken up,—still it appears to be his nature, aye, it is man's *true* nature to be social, and he clings to society as to life itself. And I am inclined to believe that this love of associa-

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tion becomes stronger as age advances.—How necessary that this inclination be rightly directed, and *how* essential that these be proper regulations and balance wheels, in this great machinery of associations, and that it be so conducted as to meet the very end and purpose for which it was intended! If this were the case, our societies would be the very sources of wonderful reformation and improvement.

I do really believe that agricultural societies and fairs may be so conducted and managed as to be of great use to the farming community, consequently to society in general. It is certainly encourageing to meet with brother farmers (brother I say, for where can the word be more appropriately used,) for an interesting exchange of ideas and relation of experiments. It is indeed social to meet at county and State fairs, there to behold the products of every kind produced from the various soils of our young and growing State. Here the farmer may, in a great measure, be able to judge for himself whether there has been any real improvement in agriculture for the last year.

Our fairs are places where the farmer may be benefitted by exchange—exchange of stock and produce of every kind—where he may buy and sell if disposed. Here he may see what may be done, and induced to extra exertion for agricultural advancement.—Some fault has been found in the management of our fairs—that there are privileged ones who receive favor at the expense of the many, &c. How this is, I shall not pretend to decide; but this much has been noticed, that in almost every society there are a certain few that wish to rule the roost, and have their own nests nicely feathered, and such, in general, are the most unworthy to be noticed when the goed of the society is considered. There is one thing which I am led to believe, (judging from observation,) that is, our fairs are thought of too much as places for speculation. I hope that they will not be converted into political pack-horses, to be rode to death by political demagogues, nor popular baggage-wagons, to groan under the burden of style and fashion. But may they meet the necessities of the truly honest and progressive farmer. If this is done, the farmers must take right hold of the work, and not be bluffed with that great humbug, "you're a know nothing," so often spoken by the acts of the would-be great, and who are ever ready, and do manage many of our should-be reform societies. I repeat, that if anything is done in the way of improvement in our agricultural associations, farmers must enter upon the work with energy and resolution, and dispense with lawyers, doctors and merchants in this particular business of agriculture. If agriculturalists are not capable of doing the business pertaining to their own particular avocation, it is high time that they were fitting a recruit for the coming generation.

Indeed, it is full time that farmers were instilling into the minds of their sons and daughters the *practical sciences*. Who more than the farmer needs intellectual training and practical science? who better than he can turn scientific knowledge to practical account? It is absolutely necessary that the agriculturalist be educated, that he may the better be prepared to profitably attend to every portion of his domestic affairs; that he may be capable of instructing and benefiting others by his timely advices, during the annual and semi-annual associations gotten up for his particular advancement. We hope and believe that the time is fast approaching when farmers as a class will be practically educated—with an intellectual and moral training, and possessing enough of natural tact and ability, so as not to be necessitated to call upon broken down merchants and *penitent* politicians to fill offices of trust in their associations for improvement and progression in agricultural pursuits.

Agriculturalists must attend to and manage agricultural societies and fairs, in order that they meet the design for which they were intended, for none but they have the necessary interest to warrant beneficial results. Who would think of calling upon a lawyer to prescribe in a case of cholera, or an M. D. to construct a corn cultivator? All wrong moves in agricultural societies are only dampers on agricultural progression. If there is humbug, deception, partiality, speculation and all these sort of things carried on, in the management of our State and county fairs, there is certainly a cause for it, and the fault must be in the managers, the principal officers of the society; they have other than deep interest in the cause. Hence the neces-

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sity of selecting interested farmers to manage and direct in matters pertaining to our State and county agricultural societies. If farmers select humbugs to govern and manage, they must *expect* "humbug" to be the result. If they promote mere political office seekers, they can but look for the damning influence of political preference and partiality and so on to the end of the chapter. If our societies flourish, if they meet the wants of the farmer, they *must* be conducted by shrewd, intelligent and honest agriculturists.

PALMYRA, March, '56. O. P. D.

For the Farmer.

WILL WHEAT TURN TO CHESS?

MESSRS. EDITORS—If you think the following is worth any thing, you may give it to your readers: The location was Triangle, Broome Co., N. Y. The land was rather low and wet; the soil black loam, underlaid with hard pan. My father chopped from it a heavy growth of timber in the summer and burned the brush all over the ground, so that it was as black as tar, or in other words it was perfectly "clean." He purchased of one of his neighbors the best kind of winter wheat, which was perfectly clean; the man of whom he bought it said if he would find the least seed but wheat, he would give it to him. This he sowed at the rate of, I think, 1 1-2 bushels to the acre. In the spring he found the ground had hove, and under it was like honeycomb—and what was the sequel: he harvested *three bushels of chess to one of wheat.* Now if the wheat did not turn to chess how came it there?—Can you or some of your readers give a reason; for my part I cannot. I see in the April No., 1855, page 100, Mr. Horace Clemans says: "I am satisfied that chess produces chess, the same as wheat produces wheat, I am satisfied that chess can be procured in no other way. * * * I have had wheat winter killed, but never had chess come from it." Again, in May No., page 130, Mr. John Townley, says—"As regards the much vexed origin of chess, Mr. Peffer and I differ, he has been trying how to grow chess, I have been trying how to get rid of it. * * Mr. Peffer's experiments convince him to believe that chess is degenerate wheat, mine that chess plants spring from chess seeds, and are produced naturally, and in no other way." Now if this should meet the eye of either of the gentlemen, I should be glad to have them answer it thro' the Farmer. Now I intend to try some experiments this spring, after this fashion—I shall go to the wheat field as soon as the snow is off, select a good, thrifty bunch of wheat, and start it from the roots enough to break the main root, mark the place, and see what it will come to. If this meets your approval, I will let you know the result of my experiments in due time.

I like the new style of the FARMER very much, and think it well pays for the price. Farmers, how can you better invest a dollar than by subscribing for the Wisconsin FARMER? ABNER K. HATCH.

ADDISON, March 9, 1856.

REMARKS.—We hope to live long enough to see that eternally vexed question of wheat vs. chess settled conclusively, but do not expect to, unless we eclipse Methusaleh.

It would seem to be one of the simplest things in the world to determine the matter by experiment in two or three years, but still it goes on from generation to generation. We would like to hear it discussed by the talent and experience of the State; and if by any chance the question should come to a finality, it would certainly be a subject of congratulation to all.—Eds. FARMER.

☞ Many Teachers fail to accomplish what they wish, because they do not understand the difference between teaching and training. To teach is to communicate instruction, to impart information; to train, is to "exercise, to accomplish to teach, to form by practice," says Webster. With those who are already educated measurably, mere teaching or precept may suffice; but for young persons, those who are to be educated, training and practice must be superadded, or much of our labor will be lost.

SOME OF the Chicago papers, speaking of the general destruction of the peach buds at the west and south, express the opinion that the influence of the Lake in softening the asperity of the westerly winds may have preserved them on the east side, in Michigan. We had indulged a hope from the same cause; but on examination our expectations have been blasted. The peach tree is dead, bud and branch.

[American Farmer, Kalamazoo, Mich.

An agricultural college is to be established in Pennsylvania.

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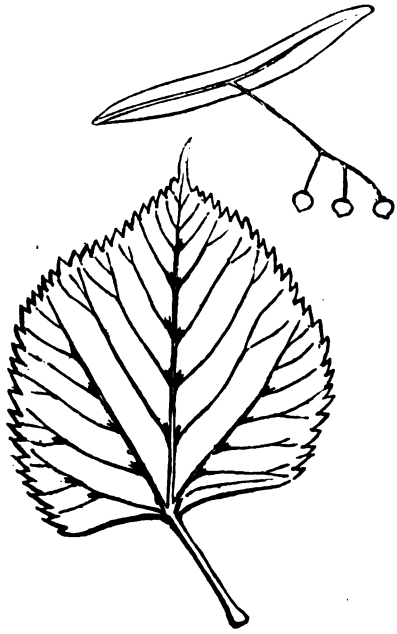
THE FOREST TREES OF WISCONSIN.

BY I. A. LAPHAM.

The trees now to be considered belong to two very different families; the first is the TILIACEÆ—The Linden or Basswood Family.



18. *TILIA AMERICANA*—COMMON BASSWOOD.

No. 18.—*Tilia Americana*, of Linnæus, the common Basswood, (Fig. 13,) is the only species of the family found in Wisconsin.—It is a very common tree in the thickly wooded parts of the state, especially where the soil is a little moist and rich. Where the basswood is found growing plentifully in the woods the farmer need not hesitate to make his "location" for the tree is a sure indication of a good soil. It shows a strong disposition to grow in little groups of three or more together. This may be accounted for on the supposition that a former tree has been destroyed, and that the present clump is the grown up sprouts that always succeed such destruction.

Although the wood is soft, destitute of strength and durability, and has but little value as fuel, it is well suited for many useful purposes. It splits easily into rails, and will last a long time if not used for those that lie on or very near the ground. Basswood is extensively used for laths—and it is the material for carving and for wooden shoes.

As an ornamental tree it has few superiors, especially where regularity of form, density of shade, &c., are desirable. This is the case along the side walks in our cities, towns, and villages, where, however we but too seldom see this tree. The fine fragrance of the flowers and great rapidity of growth are other recommendations of this tree for such purposes. The very curious contrivance by which the seeds are held up in the air so as to afford the wind an opportunity to waft them a considerable distance before they reach the ground is worthy of notice. The fruit-stalk hangs from the middle of a long narrow leaf which has a kind of spiral twist, like a plow-share; so that in falling, this leaf is constantly whirling round and round like the arms of a boy's windmill, which very much retards the fall to the ground.—This is another of those beautiful contrivances by which the great Creator accomplishes his all-wise purposes. Such contrivances might be found every where in nature, if we would take the trouble to look for them. When the eastern counties of Wisconsin began to be settled twenty years ago, and when of course the resources of the country had been but very little developed, resort was had to the basswood trees to sustain the stock through the long winter months.—Great numbers of fine large trees were cut down for no other purpose than to afford a bite for the cows and oxen. The tender branches and the mucilaginous buds are excellent for this purpose. It is said that in some countries the leaves are annually gathered for fodder, as regularly as we make hay for the same purpose.

There are other genera and quite a number of species belonging to this family, but Tilia is the only genus found in our climate and latitude; all the other belong to the more southern climes. There are four species of Basswood in the United States, one of which (*T. heterophylla, Vent.*) is found growing naturally in the rich bottom lands o the Ohio river valley. This species, with the leaves white and downy beneath, is larger and more ornamental than the common Basswood, and should be introduced among our ornamental trees. As it grows so near us it would doubtless do very well in Wisconsin.

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We come next to the family called LEGUMINOSEÆ. The family with leguminose pods, like the pea, bean, &c. The common locust may be taken as a type of the family.

No. 14.—*Gymnocladus Canadensis.* Linnæus—The Coffee Tree.

I have never seen this tree growing in Wisconsin, but Dr. P. R. Hoy, of Racine, has detected it on the bottom lands in Green county. This may therefore be deemed to be its extreme northern limit. The coffee tree may be known by the very large, twice-pinnate leaves, sometimes two to three feet in length, though the leafets are only from one to two inches long. The bark is very rough, and the branches stout, and abruptly terminated, giving the tree in winter the appearance of a dead stump. From this circumstance the early French settlers called it *chicot*, or the stump tree.

Michaux says "the wood is very compact and of a rosy hue. The fineness and closeness of its grain fit it for cabinet making, and its strength renders it proper for building. Like the locust it has the valuable property of rapidly converting its sap into perfect wood, so that a trunk six inches in diameter has only six lines of sap, and may be employed almost entire. (N. Am. Sylva, vol. 1, p. 122.) It usually grows with a slender trunk, a tree fifty or sixty feet high being only twelve to fifteen inches in diameter. But if separated from the dense forests in which it usually is found, it grows with a spreading head, affording ample shade for a large space of ground, and being altogether a very beautiful object.

Downing considers this treo very important as an ornament about our houses, and yards, where it is well entitled to a place.—"In summer, its charming foliage and agreeable flowers render it a highly beautful lawn tree; and in winter, it is certainly one of the strangest trees in appearance in our whole native sylva. Like the Ailantus it is entirely destitute of small spray, but it also adds to this the additional singularity of thick blunt, terminal branches without any perceptible buds. Altogether it more resembles a dry, dead, and withered combination of sticks, than a living and thrifty tree.—This rare and very unique exception to the usual beautiful diversity of spray and ramification is highly interesting in the neighborhood of other full-sprayed species, where the curiosity which it excites will add greatly to its value as an interesting tree at that season of the year."—Landscape Gardning, p. 117.

The Coffee tree flowers in June, and the pods are ripe for gathering in October. The seeds are very hard, and should be immersed for a few minutes in boiling water. Thus treated they vegetate freely. Our Wisconsin people would do well to obtain a supply of these seeds—and cultivate this valuable tree.

No. 15.—*Gleditschia triacanthus*, of Linnæus, the Honey Locust. According to the observations of the late much lamented Prof. S. P. Lathrop, this tree grows as far north as the vicinity of Beloit in the valley of Rock river. It may be known by its numerous large thorns, its delicate doubly pinnate leaves and its long brownish pods. In the valley of the Ohio it attains its greatest perfection. Though not a very important tree for any useful qualities, it is well worthy of cultivation on account of its beauty.

Mr. Downing in his standard work on Landscape Gardening, speaks of it as "much finer in appearance than the common locust, (*Robinia pseudo accacia*) although the flowers are greenish and inconspicuous, instead of possessing the beauty and fragrance of the latter. There is however a peculiar elegance about its light green and beautiful foliage, which wafts so gracefully in the summer breeze, and folds up on the slightest shower, that it stands far above that tree in our estimation, for the embellishment of scenery. The branches spread out rather horizontally in a fine broad and lofty head; there are none of the dead and unsightly branches so common on the locust, and the light feathery foliage, lit up in the sunshine, has an airy and transparent look rarely seen in so large a tree, which sometimes produces very happy effects in comparison with other trees. The bark is of a pleasing brown, smooth in surface; the branches are studded over with curious, long triply-pointed thorns, which also often jut out in clusters in every direction from the trunk of the tree, to the length of four or five inches, giving it a most singular and forbidding look. In winter, these and the long red pods which hang upon the boughs at that season, give

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the whole tree a very distinct character.—Another recomendation of this tree is the variety of picturesque shapes which it assumes in growing up; sometimes forming a tall pyramidal head of fifty or sixty feet, sometimes a low, horizontally branched tree, and at others it expands into a wide irregular head, quite flattened at the summit.—When but a limited extent is devoted to a lawn or garden, this tree should be among the first to obtain a place; as one or two, mingled with other larger and heavier foliage will at once produce a charming variety."

There are some specimens of this fine tree in the vicinity of Milwaukee, having been introduced as early as 1837, by W. P. Proudfit. It has been recommended, among many other plants as a substitute for the English hawthorn for hedges; but does not seem to be much employed for that purpose. It might be made to answer for such defences as are only intended to guard against cattle, &c., as along the lines of railroads—and on stock farms.

The trees with leguminose pods growing naturally in the north western states, but not yet detected growing naturally in Wisconsin, are

1. The Locust *Robinca psudacacia* Linn., extensively cultivated throughout Wisconsin—and deservedly so—on account of the value of the wood and the beauty of the tree for purposes of ornament, &c.

2. *Cercis Canadensis*, Linn., Red Bud, or Judas tree. A small ornamental tree completely covered with bright red flowers early in the spring. It should be introduced into all ornamental grounds and would doubtless withstand the rigors of our climate. It grows naturally in middle Illinois.

3. *Gleditchia monosperma*, the honey locust with pods bearing only one seed, was found in southern Illinois by Michaux; but later botanists have not been able to find it there.

If our several rail road companies could be made to see their true interest and to act upon it, they would immediately plant rows of trees and a hedge along both sides of their roads. These by their growth would save the cost of fencing and supply the ties and timber that will very soon be wanted to repair and to renew their structure. Different kinds of trees should be selected to suit the different qualities of soil. What a beautiful feature this would give to the landscape! It would afford shelter and shade to the trains. The trees and hedges might be so disposed as to keep off the bleak winds in winter and prevent in a great degree those accumulations of snow that now so often stop the trains.

Large numbers of evergreen trees are annually brought from the northern part of this state, from Mackinac, &c., but not one in ten of such trees usually survive the careless process of removal. The proper way to remove trees from their native places in the wood is to cover the roots as soon as taken from the ground with damp—(not wet) moss which can be secured with twine. By adopting this course nearly every tree, with careful management after planting, will live. It would be well for every one about to procure trees from the north to remember this hint. The trees can be packed in open boxes and thus easily transported. Every raft floating down our rivers, at the proper season, could make enough to pay incidental expenses by taking a supply of young trees properly prepared in the manner above indicated.

FIRE PROOF FLOORS.

Alluding to this subject, Mr. E. Conklin, of Cincinnati, suggests the kyanising of all timber to be used for buildings, so as to render them more fire proof. He believes that the extra cost of preparing building timber, joists, plank, boards, &c., by kyanising them, would soon be saved, in decreased expenses for insurance. The suggestion is a good one. A good fire proofing solution for timber is, equal parts of alum and sulphate of copper dissolved in water, at the rate of 2 lbs. of these substances to the forty cubic feet of water.

Mr. L. V. Bievie, of Akron, Ohio, states that the best way to prepare fire proof floors is to cover the plank floor with "Blake's fire proof paint." "It make," he says, a beautiful floor, becomes as hard as marble, and is both fire and water proof."

ODE ON SHANGHAIS.—Cover, of the Grant Co. Herald, has been writing an "Ode to the Shanghais." The following is the first verse:

Feathered giraffe! Who lent you wings?
Who furnished you those legs?
How could such everlasting things
As those come out of eggs?

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For the Farmer.

SEEDING DOWN LAND.

MESSRS. EDITORS—As the enquiry is often made through your valuable journal, as to the best mode of seeding down land, the kind and quantity of seed used per acre, and the best crop to seed with, &c., I will venture to give my experience, which has been derived from practical demonstrations in farming in this State, during the past eighteen years.

For meadow, or a hay crop, I have tried the various grasses usually cultivated in this latitude, such as the *large* or Pennsylvania Clover, Timothy, Red Top, and June Clover. I have seeded separately and mixed the different varieties, and have become *thoroughly convinced*, that the June clover *alone* is the best and most valuable of all varieties. I have practiced under the conviction for the last six years, and every years' experience has but added firmness to my convictions.

I prefer the June clover for the reason that it will produce more tons of good hay per acre than any of the other varieties. I consider three tons of hay per acre no more than the average yield, where the first and second crops are cut for hay; but my practice has been to save the second growth for seed. I consider three bushels per acre an average yield. In this way I make clover the most valuable of all my field crops.

I estimate the first growth at two tons per acre, and at six dollars per ton in the stack; and it is richly worth that to any farmer who has the sheep or other stock to consume it. The seed crop I value at six dollars per bushel, (which is below the average for the past six years), making in the aggregate, thirty dollars per acre. I am as sure of producing the above result from the first and second season, as I am of producing twenty bushels of wheat per acre on the general average.

The third season, the crop should be turned under when in the first blossom, and the growth of one acre will produce more of the necessary food for the perfection of the wheat plant, than is taken off in two crops; and hence it is that land upon which clover can be grown well, has within itself as it were, the means of its own perpetual fertility.

Having stated my preferences, it may be well to state my objections to the other grasses. The Pennsylvania clover I consider makes a very inferior quality of hay; a large proportion of it a mere coarse stalk, no bet- than pea vines. It will produce but one crop in a season (if cut in the blossom), the second growth being too late in this latitude to seed well. The first crop if saved for seed is very uncertain in its yield; as a green crop it is good, but no better than the June clover.

Timothy I have utterly condemned as a hay or rotating crop in this section of country. For hay the quality is quite inferior to clover, being mostly coarse stalks and very little blade; produces very sparingly in after feed in the fall; and but a poor yield of hay per acre—one to one and a half tons per acre I consider a good average. But the worst feature of Timothy is its deleterious effects upon our soil. The chemical reasons I cannot assign; but practical demonstrations with me go a great ways. I have never produced, neither have I seen produced, a good crop of spring or winter wheat on a Timothy sod, plowed at *any* season of the year. It seems to be more exhausting to the soil than any grain crop we produce, and I fancy I have seen its deliterious effects for a series of years.

Red Top produces a good quality of hay, but the yield per acre is very light. I consider it out of its element on our grain lands.

A *mixture* of clover and timothy produces a very good quality of hay,—clover with the timothy improving its quality, but the quantity per acre will be reduced one-third at least by the mixture of timothy. The second growth will be valueless for seed, and as a green crop, will be worthless to follow with wheat.

I have tried seeding at various seasons of the year with various crops, and the results have been various. I have sown clover seed in the fall with winter wheat, and dragged it in, and failed twice out of three times. I have sown Timothy in the fall with wheat, and found the stock to very materially injure the wheat crop the following season, by coming forward so fast as to choke the wheat.

I have stocked on winter wheat in the spring of the year, sowing my seed as soon as the ground was well settled, and dragging

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in the seed with a light drag, and rolling down with a heavy roller; in this way I have had very good success. It will succeed twice out of three times.

I have tried seeding with oats, but have never been successful. The crop is too shady. The young clover grows very weakly, and when the oat crop is removed, the parching sun of our August is sure to kill it all out. I have seeded late years with spring wheat, and uniformly with good success, when sown in good season, and the land duly prepared. I found in my experience, two very essential points to be observed, in seeding for a meadow with clover: *clean* lands, and *early* sowing. Seeding with spring wheat, after corn or any hard crop, I consider the most certain.

Seeding in the spring of the year on winter wheat, on land that has been well summer fallowed, will generally succeed if dragged in. The drag and roller will not injure the wheat crop, but will materially benefit it.

The one great cause of failure in seeding generally with our farmers, is that they crop their lands until they get so foul that it will not produce a grain crop; and then to sow on a few pounds of grass seed with their *thumb* and *finger*, and then look on with perfect astonishment if the few kernels of grass seed does not obtain the mastery over the noxious weeds left in full possession.

To sum up this article, I will say from my *personal experience*: The best kind of grass seed to sow for *meadow* is June clover—one peck to the acre. The best season in the year to sow it, is in the month of April, or earlier if the land is in good order. The best crop to stock with is spring wheat, and do not fail to cover the seed with a light harrow or brush.

I am aware that with many farmers there are three kinds of clover: the larger, June, and *medium*. With me, the seed for the June and medium all come out of one bbl.

If sown on poor, worn out lands, it will be early June and small at that. If sown on good land and in good condition, and half a bushel of Grand River Plaster sown on it per acre, it will be *large medium*.

I am also aware that a great many farmers will say that clover hay is worthless stuff, and would not feed it to their stock if it was given them. This grows more out of prejudice than from practice. It is "old fogy-ism." I have fed for the past four years, from fifty to seventy-five tons a year of it, and I am satisfied that to feed sheep, *it, alone*, will keep sheep in better condition and produce more wool, than straw or wild hay will, with all the grain you can coax them to eat; and for cattle or horses it is equally as good. To make beef, one half the meal fed with clover hay, is better than double the quantity with most of the other kinds of hay.

To seed for permanent pasture, I should recommend sowing not less than sixteen quarts per acre of Timothy, clover, Red Top, Kentucky, blue grass, (which is nothing more nor less than our June grass); and add at least one pound per acre to the mixture of white clover. These varieties will give a constant succession of green food throughout the season, and if plaster is used on the field, three years' time will give the white clover almost the entire possession.

I intended when I commenced this article to have given my experience in the use of plaster on clover and other crops, but am already occupying too much valuable space, and I fear wearying the patience of your readers. To those who now have a field (whether well or poorly) stocked with clover, I will say, use plaster by all means, and sow it early as you can after the ground settles; it will pay on the investment from one to two hundred per cent. It can be obtained in Milwaukee by the quantity at $1,75 per bbl. containing three bushels,—sufficient for six acres.

E. W. EDGERTON.

SUMMIT, Waukesha Co., March 26, '56.

"I WAS MISTAKEN."—A lively writer has said, "I was mistaken," are the three hardest words to pronounce in the English language. Yet it seems but acknowledging that we are wiser than we were before to see our error, and humbler than we were before to *own* it. But so it is; and Goldsmith observes, that Frederick the Great did himself more honor by his letter to his Senate, stating that he had just lost a great battle by his own fault, than by all the victories he had won. Perhaps our greatest perfection here is not to escape imperfections, but to see and acknowledge and lament and correct them.

Jay.

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GEOLOGY OF WISCONSIN.

The agricultural capacities of the state of Wisconsin as a whole, may be inferred generally from its surface rock deposits. These, with exceptions to be noted, differ from those of every other western state. Let me try to illustrate this difference to the reader.

If, for example, a traveler were to start from Madison on a direct route northward, for Lake Superior, he would find the following order of geological deposits: At the place of starting, a surface layer of Magnesian Limestone, worn and broken into rounded hills, with occasional mural escarpments or abrupt precipices. On nearing the Wisconsin River, the Limestone appears to run out; or if afterwards met with in masses, it is found as outliers, capping the tops of the highest hills. A Sandstone is there first found in *place*, or in regular layers. These are the upper layers of the Lower Sandstone of Owen, though differently named in the New York Reports. Following up the Wisconsin river over lengthy plains of sandy soil, with numerous hills of drift and sandstone scattered at intervals, to Grand Rapids, and the bed of the stream will be found resting upon gneiss, or a corresponding granitic or primary deposit. This will also be found at Stevens' Point, Wausau, and upward to the extreme head waters of the river. The slope of Lake Superior has deposits in some respects peculiar to its own basin, not necessary to consider here. Thus the traveler will have touched *bottom*—that is reached the lowest or primary deposits, composed of quartz, feldspar, mica, and the other classes of rocks having a general origin in and through the agency of heat.

A person crossing the state east and west, would find these primary rocks in place on the Menomonee, and probably other streams flowing into Green Bay, and westward at the falls of Chippewa, St. Croix, and the upper waters of the Black River. Thus, the interior of what is generally called "Northern Wisconsin" is of primary formation, and more nearly corresponds with New England in this respect than any other western state. Wisconsin has a central axis, or back bone of granite, so to speak, in places more than one hundred miles in width, and is alone the only western state where this lowest deposit is to be met with in place, east of the Rocky mountains. This central primary region is, however, unlike New England in most of its physical outlines. It is generally level, or nearly so, without mountains or great elevations. Examination shows it to have been the seat of volcanic agencies in remote periods, of which no conception can at present be formed. Its surface is seamed with numerous trap dikes, which divide it into ridges and depressions; and the falls of the rivers finding a head here, are mostly the result of these ancient firey floods, across their channels. One of these ridges or dykes extends from Kewaunee to the falls of St. Croix, more than a hundred miles, and is from five to twelve miles in breadth. All these eruptions took place under the waters of a primeval ocean of great depth; and hence, we see the hard and flinty trap, instead of light scoriæ and lava, as would have been the product had the liquid not cooled under an enormous pressure.

But it is of the surface of this extensive region I wish to speak, as it is now found. The drift has covered it more or less, leaving its characteristic monuments. The material of the drift is coarser than further south. Where the rock has decomposed, it has left a coarse angular sand, if that term is applicable to quartz in an unground state. The dykes, which often have considerable width, are covered generally, with a fine growth of maple, forming what are called maple ridges, with a very passable quality of soil. The intervals between these ridges however, are largely covered with small lakes, and extensive marshes, it is a lacustrine region, the source of numerous streams. Its nameless lakes may be counted by hundreds. On the dry and sandy grounds adjacent the evergreen flora, with anintermixture of oak, and some other varieties of trees, cover most of the surface. There are not lacking, in places, many square miles of dreary sand, over which vegetation as yet has scarcely obtained a foot hold.

On both sides of this region, margining the Mississippi and Lake Michigan, and descending towards either, the traveler would find a marked change as he progressed. The sand stones and lime stones re-appear, and an improving soil as a consequence.

A geological map, showing the boundaries

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of the several great deposits of primary rock, sandstone, and limestone in this state, has been published by I. A. LAPHAM, Esq. of Milwaukee. It exhibits at a glance, more than any written description can convey, and is one of the very many contributions of that gentleman to accurate, scientific knowledge of the physical capacities and productions of Wisconsin. He is entitled to all honor and lasting public thanks for his noble and disinterested efforts.

It is no disparagement to central northern Wisconsin, to say it is not adapted to raising grain, or, generally to productive farming. Nature has here, in the midst of vast surrounding prairies, accessible by numerous water courses, established the pinery of the west—has stored up the material through which the settlement and civilization of these fertile wastes is rendered possible. It has done more. The hard and rugged trap and flinty granites are the matrix, concealing unlimited metalic wealth. It gives to civilization, and especially to the people of Wisconsin, that great and essential element of enduring prosperity and higher advancement, a division of industrial pursuits, which must ever place them in advance of their neighbors. We have in measureless abundance, metalic, timbered, agricultural, and commercial elements of prosperity, which mutually act upon, and sustain each other. To say that a portion of our state is not a grain country, is in this case to say it is something better.

This general review will throw some light upon a subject little understood; would that it were more so. It is presented with some manifest imperfections, to your readers.

Yours, H. A. T.

SINGULAR DISCOVERY IN ALLEGHANY CO.—On the 20th ult., a band of laborers on the Central Railroad, in Alleghany Co., on Mr. Cady's section, penetrated into a cave, the mouth of which was about 300 feet from Jackson's river. Some of the workmen entered it, and continuing on their course, passed under the river and came out on the other side of it. In the cave was found the body of a hunter, with all the equipments lying near him. About $6,000 in bonds, payable to Mrs. A. Cross, and dated in 1823, were found on the body, which was in a wonderful state of preservation. The bonds are signed by many of the oldest citizens.

VEGETABLE PHYSIOLOGY.

PRACTICAL HINTS—NO. 2.

MESSRS. EDITORS—In the February number of the Farmer we touched upon the principles of pruning. Much more may be said upon this matter.

Pruning is practiced for various purposes—to promote fruitfulness—to quicken the growth—to give symmetry, or otherwise control the form. Now, pruning is not a mere mechanical operation, but must be performed upon certain principles, derived from the internal structure and mode of growth of the plants.

If a tree becomes stunted, and its pores become filled or clogged, or from any other cause the sap seems to flow sluggishly, and we wish to effect a vigorous growth and renew the tree, physiology suggests that we provide it with new arteries and veins and lungs, i. e. with new branches and new leaves. The physiological fact that there are not only visible buds, but buds latent all over the trunk and branches, encourages us to cut off any diseased or sluggish portion of trees in the confidence that new branches will put forth. The whole force of the sap entering these new branches, they will grow most luxuriantly.

Many trees, peach trees for instance, are apt to grow stragglingly if left to themselves,—some portions very thriftily at the expense of others. Cut back the thrifty limbs considerably, and others very little, if at all.—This must be done not only for the actual reduction of the parts that grow too much, but also to give the feeble portions the advantage of a larger proportion of leaves.—The same object may be offected, though not so satisfactorily perhaps, by partially stripping the thriftier limbs of their leaves.—Where there is a preponderance of leaves there the sap will go, and there wood will be formed.

In pruning to open fruit to the rays of the sun, it is not safe to reduce the leaves very extensively, lest the tree or vine be injured for the next season.

Pruning is very often practiced to induce fruitfulness. There is a process of pruning the roots sometimes called foreshortening.—It is practiced upon the principle that checking growth causes fruit-buds instead of leaf-

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buds to be formed. It brings trees into early bearing, and the fruit is generally of extra size. A sharp spade is sometimes thrust into the ground a foot, more or less, from the trunk of the tree; a trench is dug, the roots exposed, and more carefully cut off with a sharp knife. Upon the same principle and for the same purpose, the tops are cut back, or more generally, the extremities of young shoots are pinched off between the thumb and finger. Fruit-growers deem this process very important. Pinching is practiced both for regulating the growth and for fruitfulness. It is better than clean cutting, as it impedes growth more effectually.

Even when pruning is resorted to in order to accomplish some simple purpose, such as making the tree symmetrical, or trimming out interfering branches, regard must be had to physiological principles.

The season of the year at which pruning should be done is a very important point.—Early in spring, before the buds expand, is regarded the best time,—neither so late that the wound will bleed severely, nor so early that the terminal bud will be injured. The rapid spring growth soon after pruning is desirable that the wounds may heal.

Generally, in this latitude, the month of March will be found a favorable time for pruning fruit trees and bushes. Grape vines had better be done earlier and later,—once thoroughly during the winter, and many times during the summer to prevent a great waste of growth.

If the object of pruning be to check the growth of a tree, it may be most effectually accomplished just after it has leaved out.—Then, channels for the sap have already been opened and are in free operation, and the tree must take a little time to rally its strength and put forth new buds, and open a new course for the circulation of its vital fluid.

In pruning to induce fruitfulness, it is necessary to observe the peculiar physiological habits of different kinds of plants. The fruit of the walnut and the fig is borne by the wood of the same season; grapes grow on wood of the last season, and pears, apples, plums, &c., on wood of several years' growth.

Not only the degree of fruitfulness may be affected by pruning, but also the season of the year for bearing. It is a well established fact, already alluded to, that fruit buds are produced by checking the growth of a plant. The reverse is also true, namely, that the formation of fruit buds is deferred, and not always entirely prevented by quickening the growth. Hence by cutting down the strong canes of the Raspberry to two or three buds, the laterals thus produced grow very exuberantly, and the fruit is formed several weeks later. A late crop of strawberries is sometimes effected by the destruction of the usual crop. By the same method a late crop of roses and other flowers may be obtained.

It is well known that early kinds of apples have time after yielding their fruit to form fruit buds for the ensuing year, and therefore bear good crops annually, while trees like the baldwin, which do not bring their fruit to maturity till late in the fall, yield abundantly only alternate years. It is also known that the bearing year of the whole or portions of such trees can be changed by plucking the fruit soon after it is formed.

The object of the writer in these articles is not only to make some important practical suggestions, but also to make apparent the reasons for the processes he recommends.—Farmers and horticulturists cannot perfect themselves in their arts till they study, acknowledge and act upon scientific principles. At a future time something will be said upon the training of trees, vines, &c. H. F. B.

Extraordinary Egg.—We were presented this morning, by Mr. Shirley, (of Fairfield), a remarkable curiosity in the shape of an egg. The egg is a regular Shanghai, and is an egg within an egg. The shell of the outside one is of such a size that we will not risk our veracity by giving its dimensions. The inner egg is completely formed, and is a respectable egg. Although we have been Secretary of a Shanghai Lodge, and have seen many queer and mysterious sights, we must say that never have we beheld such an egg. [Ohio State Journal.

Death from Swallowing a Bean.—The Sterling (Ill.) Times of the 15th ult. says:

Mr. S. W. Cook, residing across the river, lost a child on Thursday, about eighteen months old, in the following painful manner. The little one had been given some beans to play with, and in attempting to swallow one it lodged in the windpipe. A physician was called immediately, but all attempts to relieve the little sufferer proved fruitless, and it died in a few hours.

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STOCK REGISTER.

BLACK LEG IN CATTLE.

The American Veterinary Journal copies several communications which appeared in this Journal before the present publishers took charge of it, and comments upon them in a manner which cannot fail to be instructive and interesting to the most of the readers of the FARMER, and therefore we copy them at full length. The Veterinary Journal is published at Boston, Mass.—edited by GEO. H. DADD, M. D. It is a journal we would like to see more generally circulated throughout the west, as it disseminates knowledge, valuable—because reliable—wherever it circulates. It costs but one dollar per year, and any one extensively engaged in stock raising cannot make a better investment of that amount, (provided, *of course*, he already takes the FARMER,) than by enclosing a dollar bill, forthwith, to the publisher, S. N. THOMPSON, 97 Union Street, Boston. Let us here add that we have received several "cures," from correspondents from different parts of the state, similar to the ones quoted below; but we did not consider it proper to give them a place in our pages, as we do not sanction such barbarous treatment in any case, nor consider it beneficial in its effects. We shall at all times be glad to receive communications from those who have watched the symptoms or effects of any of these diseases, together with any other suggestions, for publication: EDS. FARMER.

In the "Wisconsin and Iowa Farmer," are found several articles under the above caption, and we feel disposed to attempt to throw some light on the nature of the disease, but the symptoms as recorded by the contributors are *so* indefinate that we dare not risk more than mere opinion. One writer thus alludes to them:—

"The first symptoms we observed were, that the victim commenced kicking with the leg affected, in a manner that showed that its pain was excruciating, with a peculiar wildness that was not to be mistaken. A valuable cow of my father's was taken, and he tried all the means he could think of—such as cutting open her flank and washing it with every cooling application he could think of, ending with cutting a gash to the bone and filling it with salt. On the second day she died, and on opening her was found to be mortified, even to the spine and kidneys. I am thus particular in describing the symptoms. as I have seen no case of Black Leg in the West, and possibly might have been a different disease."

Another informs us that "he found a yellow sediment settling under the skin, which, when tapped on with the end of the finger, had the appearance of being air." "I cut the skin and let it discharge all it would; then bathed the parts affected with Davis' Pain Killer and liniment combined. After repeating this once—she having previously commenced to swell and bloat—found it necessary to let out the air, she commenced to get well, and in eight hours would eat some. After the medicine* operates, there is no danger, only keep them dry. I have pursued the same course since, with others—except letting out the air—with good success, and lost none under it."

Guided by the above symptoms, brief as they are, we understand that three different forms of disease are represented. The first seems to be of an inflammable type—probably inflammatory fever. The second is a feature of emphysema—a collection of gas beneath the skin, and if fluid was found in the same situation, we should call it *œdema*, local dropsy.

The latter feature, (*bloating*) indicates *tympanitis*; windy distension of the bowels, and is the result of indigestion, therefore cannot be considered as black-leg. The same is true of *emphysema*, and *œdema*, these states do not constitute the primary disease, but are merely symptoms, which may present themselves during the progress of very many diseases. We should like to have more information regarding the above diseases. There are certainly some medical men in the vicinity of *Wisconsin* that might be induced to investigate the matter, and give the farmers of that locality and us more definate information regarding the nature and symptoms of "a disease that is said to destroy in the course of a year many valuable animals."

We want to know something about the state of the pulse, and respirations, the condition of the bowels—whether they be lax, or constipated, the character of both fæcal and urinary discharges, both as regards quantity and quality. The condition of the animal must also be known, for should the victim prove to be fat, we then have a key to unravel the cause of the malady.

We should like to know what kind of food such animals are kept on, and also what care is bestowed on them, with such data we will undertake to enlighten our

* One teaspoonful of *Davis' Pain Killer*, one of Bristol's Nerve and Bone Liniment, and one of spirits of camphor, in half a pint of lard and half a pint of strong soap-suds. If the poor brutes ever got well after the administration of such an *hotch potch*, their recovery must be attributed to the potent agency of the vital powers, which resisted both the disease and treatment.

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western friends on the subjects, of both prevention and cure: for we are perfectly satisfied that if the nature, symptoms and treatment of the diseases peculiar to Western regions, were properly understood, much valuable property might be saved.

On perusing the following paragraph, which appears in the above periodical, over the signature of Matthew Towers, the reader, if he have any correct ideas of the principles of veterinary medicine, will set his face against any such barbarous and unnecessary treatment. The remedy is offered in view of preventing black-leg:—

"*Preventive.*—Take spring calves in the month of October; cut a small incision in the hollow above the foot—on the top of the flesh a small blue vein appears; take a crooked instrument, the shape of an awl, and put the point under the vein, raise it up so that it can be cut, and take about an eighth of an inch out of the vein. Don't sew up the incision. It must be done on all the four feet.

I have cut many hundreds, and know of thousands being cut, and never knew of one dying with the above disease after being cut."

We are not disposed to question the good intentions of men who practice barbarities of this or any other kind, on the bodies of inferior animals, but we do seriously urge them to remember that cattle have nerves to feel and are as keenly sensible to pain as we are, therefore, all unnecessary operations, even should they have received the seal of antiquity, ought to be avoided. This is the age of progression. The lamp of Veterinary science is illuminating the mistified halo, which has hitherto surrounded our barnyard practice; and before the barbarities of by-gone days are practiced on our domestic animals, let us be satisfied that we are using *rational* means for the recovery of the sick, such as science and common sense confirms. Just as rational would it be, if it were at all rational, to take an infant and divide one of the posterior veins of both feet, in view of preventing disease common to adult life; which, after all, might never occur, the little creature not being predisposed to the same.

Let any one just study the anatomical structure of the foot of an ox, and he will learn that the vein which we are recommended to sever and amputate from, is called the *coronary*, and is engaged in returning blood from the vast venous plexuses of the foot, which requires to come in contact with the lungs for purification and oxygenization. Any impediment, such as severing a vein, which interrupts the free circulation, or return, of blood to the heart and lungs, cannot be beneficial, but otherwise.

It will be seen that the vein is nothing more than an elastic hollow tube, a mere vehicle through which the blood courses, therefore cannot be supposed to have any specific power over other parts of the organization in warding off disease.

We have neither time nor disposition to lengthen this article in exposing the above fallacy; we feel that the mere mention of the matter will suffice for its suppression, at the same time let it be understood that we are not given to fault finding, but only desire to correct errors that have too long existed.

For the Farmer.

WATER FOR OUR PRAIRIE REGIONS.

Messrs. Editors—I noticed a communication in the Feb. No. of your excellent Farmer from D. S. C., recommending very highly cisterns under buildings, by which prairie farms may be supplied with water.

I also by reading a traveler's notes in a Boston paper, learn that there are being sunk in the Sanjose valley, (Cal.), Artesian wells, from 300 to 600 feet deep, throwing out a column of water from 4 to 6 inches in diameter, and from five to eight feet above the surface, at an expense of two dollars per foot.

Now, Messrs. Editors, I wish to enquire through your journal, how deep a well of this kind must be sunk, after striking water, in order to bring the water to the surface?—Is there a man in this State who is accustomed to, and has the apparatus for sinking them? If so, what size bore he could sink, who the man is, where he is, and what will be the expense per foot for sinking?

Please give us this information, and all may judge of the propriety of locating buildings near a low, marshy place to secure stock water, or of building cisterns or sinking wells.

J. B. Carle.

Janesville, Feb. 18, 1856.

Who can answer the above questions?

Eds.

Gentility is neither in birth, wealth, manner nor fashion—but in the mind. A high sense of honor, a determination never to take a mean advantage of another, an adherence to truth, delicacy and politeness towards those with whom we have dealings, are its essential characteristics.

You may gain knowledge by reading, but you must separate the chaff from the wheat by thinking.

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HORTICULTURE.

ORCHARD PLANTING.

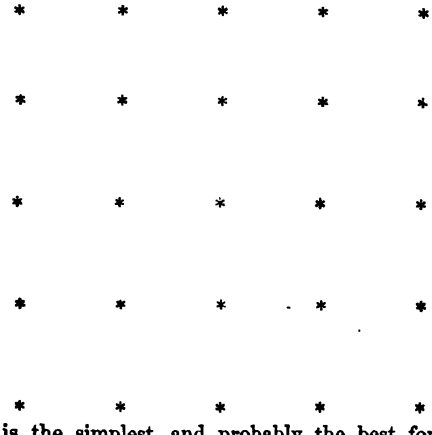
The first thing to be done is to select a suitable site, convenient to the house if practicable, and not immediately on the highway if avoidable, as it is not well to tempt people unnecessarily, with what even mother Eve could not withstand. A dry, rich, friable soil is preferable, and if sheltered from the west winds, all the better.

The land should be thoroughly and deeply plowed, especially if it has a hard sub-soil near the surface; the roots should find a mellow, penetrable soil, from twelve to eighteen inches below the surface.

Next, after the ground is plowed and dragged, comes the staking out process, which, by the way, is no bungler's job, particularly if the *quincunx* mode is adopted. We present a plan of both, the rectangular, or square, and also of the *quincunx* mode, together with the remarks of BARRY on the subject:

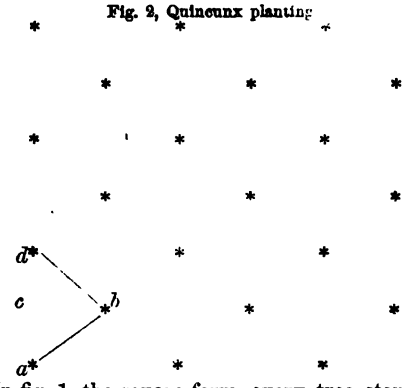
"The ordinary arrangement of orchard trees, is the square or regular form, in rows the same distance apart, usually 30 feet, and an equal distance between each tree. Thus, in planting a square of 100 feet, for example, the trees to be 25 feet apart, we commence on one side, laying a line the whole length. On this line we measure off the distances for the trees, and place a stake indicating the point for the tree. Thus, in fig. 1, we have five rows of five trees each, making twenty five in all, and all twenty-five feet apart. This

Fig. 1, square planting.



is the simplest, and probably the best for very small orchards. The better plan for very large orchards is what is called *quincunx* (fig. 2), in which the trees of one row are opposite the spaces in the next. In this way, although the trees are at equal distances, there is a larger clear area around each tree.

Fig. 2, Quincunx planting



In fig. 1, the square form, every tree stands in the corner of a square, in the centre of, and equally distant from *four* others. In the quincunx, every tree stands in the angle of a triangle of equal sides, and in the center of, and equally distant from *six* others. Thus, in the latter, there is a greater space left for the admission of light and air, and trees so planted may be at less distances than in the other. The operation of planting is more complicated than that of the square, the rows not being the same distance apart as the trees are in the row. The first thing to be done is to find the two measures. Suppose, for instance, we propose to plant a plot of ground one hundred feet square, and to have the trees twenty-five feet apart every way, we make a triangle of wood, *A*, *B*, *D*, each side of which is twenty-five feet; we we then measure the distance from the angle *B* to the center of the opposite side at *C*, and this gives us the distance between the rows, which will be about twenty-one feet. This will be called the *small* measure; and with this we measure off on two sides the distances for the rows, and put down a stake at each. We then commence on the first row, and with the long (twenty-five feet) measure mark off the places for the trees, and put down a stake to each. The measurements must be made with exactness, in order to have the plantation present a regular appearance, as in fig. 2."

When the ground is staked out, the next thing is to dig the pits; which, if the ground has been plowed 18 inches deep, will only need to be deep enough to properly receive the roots of the tree. But if not subsoil plowed, the pits should be three feet wide, and twenty inches deep, and the larger the better. Now everything is ready to set the orchard, the next thing is the orchard to set.

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The best way to get that is to go personally to the best nursery you know of within fifty miles, and select your own trees. I would almost as soon send for a wife, or buy one of an itinerant pedlar, unsight, unseen, as an orchard. They are both articles that it takes years to prove, and that money cannot make good if found wanting. We repeat then, if you want either of the foregoing articles, and especially the latter, go yourself, if possible and make the selection.

In making a selection of trees, reference must of course be had to the size and nature of the orchard intended to be grown. If simply for farm use, and the farm of moderate size, 100 to 150 apple trees is about the thing. About one tenth of them summer, three tenths fall, and the remaining six tenths winter and spring varieties. We append a list of varieties most proved and preferred by our best cultivators in the west.

SUMMER APPLES.

Early Harvest—Ripens first of August; large size; sub acid.

Early Strawberry—Small, medium size; sub acid; striped.

Red Astrachan—Large; color, deep crimson; acid; good for cooking.

Summer Rose—Medium size; pale yellow, with red cheek.

Summer Queen—Large, conical; striped with red.

Early Joe—Medium size; deep red in the sun.

Sweet Jane—Ripens in Aug. and Sept.

Sweet Bough—Large; pale yellow; sweet and juicey.

Spice Sweet—Large yellow; spicey.

American Summer Pearmain—Medium size; juicy and rich; Sept.

AUTUMN APPLES.

Porter—Medium size; yellow; sub acid; ripens in Sept.

Fall Pippin—Large; yellow; delicious; Oct. to Jan.

Gravenstein—Large; striped; juicy, sub acid; Sept. to Oct.

Baily Sweet—Excellent sweet apple; Oct. to Jan.

Rigeston Pippin—Large; striped; acid; Oct. to Nov.

Fameuse—Medium size: red out side; Nov.

Fall Wine—An early bearer: Sept. to Oct.

Autumn Strawberry—Medium size; sub acid; Oct.

Autumn Swaar—Rich, spicy; Oct.

Maidens Blush—Large; tender, acid; Oct.

Hawley and *Jersey Sweet.*

WINTER AND SPRING APPLES.

Belmont—Large; pale yellow, with red cheek; tender, crisp and of fine flavor; ripens from Oct. to Jan.

Peck's Pleasant—Large size; yellow, with a brown blush; mild sub acid; tree a fast grower; early winter.

Rambo—Medium size; dull, yellowish red; mild, fine flavored; tree a fast grower, and productive; early winter.

Seek-no-further—Medium size; dull red, russetty; tender, rich and spicy; tree good grower; Dec. to April.

Yellow Bellefleur—Large; yellow; red on sunny side; tender, juicy, and rather acid; tree rather slow grower; good all winter.

Golden Russet—Medium size; greenish yellow russet; high flavored and juicy; tree a fast grower; Dec. to April.

English Russett—Small; greenish yellow russett; high flavored and juicy; tree a vigorous grower; keeps till July.

Dominie—Medium size; greenish yellow with stripes of red; resembles the rambo, but keeps later; tree a fast grower and great bearer; Dec. to April.

Esopus Spitzenburg—Large and excellent; resembling Newtown Pippin; flesh, yellow and juicy; Jan.

Rawle's Jannet—Medium size; pale red; keeps till May.

Wine Apple—Large medium size; vinous, rich and pleasant; good for cooking; Oct. till March.

Vandervere—Medium size; yellow, streaked with red; rich and juicy; grows best on sandy soil; early winter.

We offer a greater variety in the foregoing list than we would recommend people ordinarily to buy, as too great a variety is no object.

But it often happens that every kind cannot be found in a nursery; hence it is an object to have a few extra varieties to swing on. So much for the orchard, next for the fruit garden.

Some, in the foregoing list, are more or less objected to by different parties, but on the whole, we deem them all safe for western cultivation.

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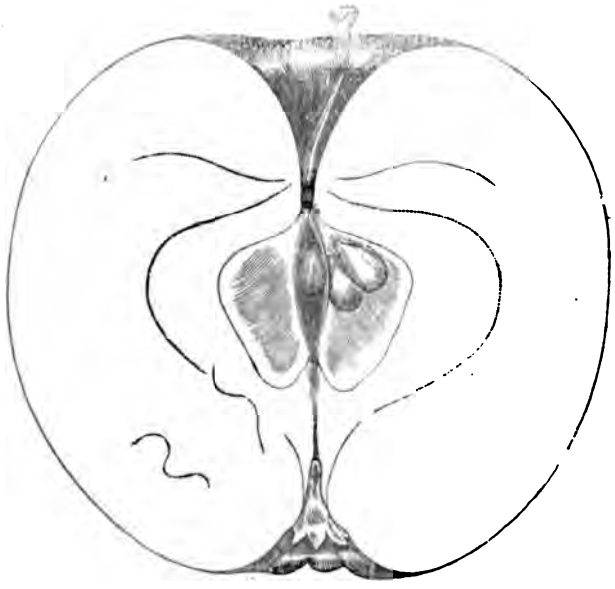

APPLES—THE SWAAR.

We have aimed as far as possible to avoid recommending those kinds that are understood not to do well root grafted, because it is next to impossible at the present, to get standard grafted trees at the nurseries. Nurserymen, many of them, like "sale" boot and shoe makers, get up work to sell, and consequently many of their trees often prove a "sell" to those who buy them, in more ways than one. We repeat, go to the nursery yourself if possible, and select trees not only of the right varieties, but of the proper size, and good, compact, regular form. For thrifty, fast growing, fall and winter kinds, four year old trees are about the thing; but the summer varieties are nearly all slow growers, hence five year olds may be preferable.—We don't like too small a tree, nor yet too large; about an inch in diameter is the best size.

See that they are carefully taken up with a good supply of roots. It is too common among some nursery butchers to spade so close as to leave nothing but a grub of the tree; and what is worse, they know so much usually, that they cannot be told anything. Half of the trees that are taken up in the nurseries are spoiled to start with, and the other half are checked badly in their growth.

Look well to this then, and get a root as well as a tree; and if you cannot get the one don't take the other; for it is a well settled fact that apple trees will not grow, like willows, from cuttings.

If you have any considerable distance to take the trees the roots should be puddled and well packed in wet straw, or moss when obtainable. When at their destination the roots should be covered with moist earth untill they are planted, and the sooner that is done the better.

Planting—The roots that have been mared in taking up should be pared smooth, and the tops shortened off about the same as the roots to preserve a proper equilibrium. The holes should be filled up to the proper depth with mixed mellow soil, intermixed with fine manure if the soil is poor. Then place the tree in its proper position, putting the heaviest side of the top, or any lean in the body, towards the south-west, as the prevailing winds from that direction will eventually ballance it the other way. Spread out all the roots in as natural a manner as possible, and fill and work the fine soil among and around them, packing the whole about as firm as the natural earth. When the roots are well covered it is well to pour in a part of a pail of water, to settle the earth more compactly about the roots. After an hour

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or two the earth should be leveled up around the tree about as much higher than it stood in the nursery as it will naturally settle, so that the tree will stand the same depth that it naturally grew. If the top of the tree is large, or the situation bleak, it is well to put down a stake, when the tree is set, to which to fasten it with a soft string for support.

Crooked trees may be easily straightened when small, by a proper staking and tying; and when they are disposed to lean, care should be taken "to train them up in the way they should go."

It is well to wax over all considerable cuts or bruises, as they will heal as much better for it, as a sore finger for being done up and cared for.

After the trees have been planted a few days, and the earth is properly settled and warm, then apply the mulching; a simple, but very essential part of the operation.—Coarse straw manure is the best material, and a circle of it, four feet in diameter and four inches deep, around the tree will keep the earth moist and light for the whole season, through any kind of weather. No drought can affect it, nor will any watering be necessary. A good mulching will save the loss of three-fourths of the trees that ordinarily die the first season. It is an excellent plan to mulch youngerly trees, during the drought of summer, for two or three years, until they are well rooted.

Now the orchard is planted, the next and not the least important thing, is a fence around it; that will at all times exclude cattle and sheep and all the larger animals. If this last safeguard is omitted, and the orchard lies in common with all the rest of the farm, the chance for a fair reward for the expense and labor it cost is rather small. But selected, planted, fenced and properly taken care of, for a few years, and we will warrant it to pay one hundred per cent. upon the outlay, from first to last, for a generation. Who, that has a rood of ground, would not plant and orchard?

Root crops are the only kind that should be grown in a young orchard, and seeding it down to grass is as bad for the trees as taking their bark off. In succeeding numbers from month to month we will give the requisite hints and instructions for taking care of the orchard, and hope they will be heeded.

FRUIT GARDEN.

Under this head we would place all the smaller fruits such as pears, plums, cherries, peaches, &c., &c. As they all need special attention it is better to plant them in a yard or garden by themselves, immediately near the house and connected with the kitchen-garden.

The standard and larger trees should be placed outside, being careful not to put them so near the fence as to allow the fruit to drop the wrong side when the tree becomes large. We would repeat here what we said of apples, don't hang the tempting ripening clusters of fruit over the highway unless you wish to "lead others into temptation" and be in constant hot water yourself about your fruit. If the farm buildings can be used as shelter from the bleak west winds it will save the necessity of anything got up on purpose.

We shall not recommend new beginners to go largely into pears, and especially dwarfs, notwithstanding all the fine things said about them, mostly by men who carry on a kind of morus multicaulis speculation in them. They are an incomparably fine fruit when successfully grown, but it requires considerable knowledge and nice cultivation to ensure success.

A few of the hardy well proved standard kinds and a very few dwarfs will make up our lists. Amateurs and professional fruit growers will of course select for themselves and on a much larger scale.

SUMMER PEARS.

Blodgood—Ripens in August.
Bartlett—September.
Osband's Summer—Early in August.
Dearborn's Seedling—August.
Ananas 'd Ete—September.

AUTUMN PEARS.

White Doyenne—October.
Flemish Beauty—September, October.
Louis Bonne 'd Jersey—Sept., Oct.
Maria Louisa—Oct.
Oswego Beurre—Oct., Nov.
Seckel—Sept., Oct.
Stevens' Gennessee—Sept., Oct.
Swan's Orange—Oct., Nov.

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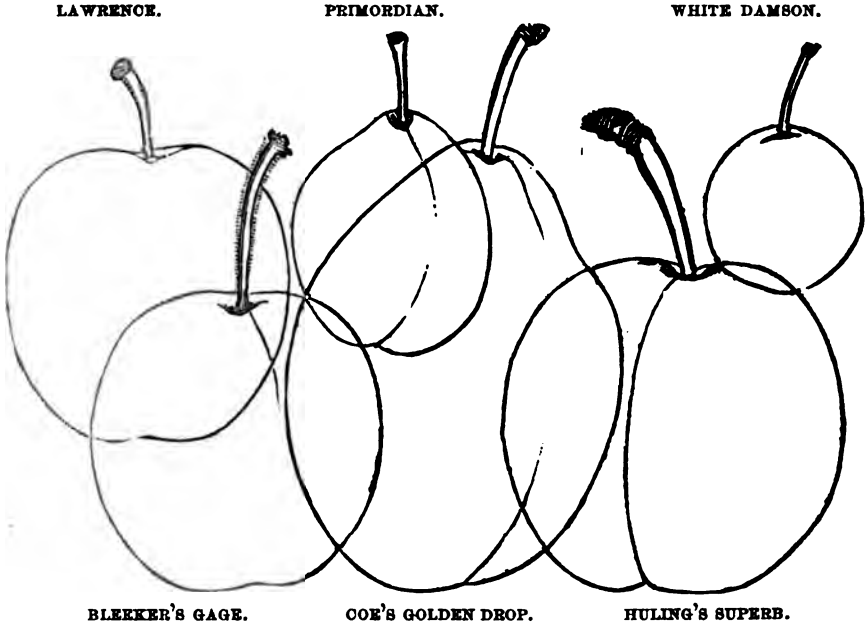

PLUMS—SIX CHOICE VARIETIES.

WINTER PEARS.

Vicar of Winkfield—Nov., Jan.
Passe Colimar—Dec.
Glout-Morceau—Dec.
Easter Beurre—Feb. to May.
Beurre 'd Aremberg—Dec., Jan.

The foregoing varieties are all recommended as growing well as standard trees, or as dwarfs on quince. Therefore it will be safe to order standards or dwarfs, as may suit the plans or circumstances of the buyer.

It may be worth while to plant some dwarf trees between the standards in every garden, as they will take up but little room, and may come into bearing before the standards. Twenty feet apart is a good distance for standard pear treas, and dwarfs may be filled in between them, within six or eight feet, if desired.

PLUMS.

Bleeker's Gage, Coe's Golden Drop, Green Gage, Imperial Gage, Jefferson, Magnum Bonum, Washington, Smith's Orleans, Lombard, Red Gage, McLaughlin, are all good varieties, and numbers of them are said not to be attacked by the curculio.

Plums should be set near the frequented portions of the house and yards, where fowls and pigs run if practicable, as the curculio is said to be shy, and often frightened away by people passing and repassing. Besides, the chickens and pigs are apt to destroy them or their eggs.

We have before recommended grafting in the root of the wild plum, as the best way of getting good and cheap trees. They often come into bearing in four to five years, and sometimes in three.

On this page we present some fine outline illustrations, of the leading plums, and we will present others in the May number.

CHERRIES.

We would not recommend beyond the Duke and Morello varieties. The Hearts and Bigarreaus, are too tender for our severe climate.

The first named varieties do well with proper cultivation and care. Set them in sheltered places, and where the birds can best be kept away.

THE TILLERS OF THE SOIL.

Who makes the barren earth
  A paradise of wealth,
And fills each humble hearth
  With plenty, life and health?
Oh! I would have you know
  They are the men of toil—
The men who reap and sow—
  The tillers of the soil.

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For the Farmer.

A CHAPTER ON SMALL FRUIT.

BY A. G. HANFORD, OF WAUKESHA.

To complete the succession of fruits, between the long keeping winter sorts and the earliest summer varieties, comes this important class. But a short period is required to bring them into a bearing state, when an annual crop may be expected as surely as from any other. These considerations should enhance their value, and commend them, especially to the resident of a newly settled country. Fruit being no longer regarded as a mere luxury but an indispensible and healthful article of regular diet—the small fruit should not be overlooked. Yet how few know them in the perfection of their best varieties under the best culture. Look at our gardens as a general thing. A neglected patch of Strawberry vines in some out of the way place, over grown with grass and weeds. A row of straggling Currant bushes, in a stiff sod, left to take care of themselves, receiving no care in the way of manuring and pruning—producing small, seedy, exceedingly acid fruit, scarcely worth picking. Raspberry bushes along the fence, where they stand unmolested by tillage year after year, producing small crops of poor fruit How seldom do we meet the large luscious fruits of the best sorts, the product of thorough cultivation. Who has a *plenty* of fine Strawberries, or Gooseberries, or Raspberries to supply their tables in any sort of abundance? The sauces upon our hotel and tavern tables are of wild or some other foreign dried fruits. The larger prices obtained by those who have turned their attention in this direction, is good evidence of the profitableness of their culture.

THE STRAWBERRY, so easy of cultivation, so delicious, and withal so healthfula should be found in the smallest garden. A small bed of good sorts well cared for, will afford a family supply for several weeks, and until the raspberry may take their place. To make a bed, choose a good light loam—not too rich—work deeply (two feet will not be too deep)—plant at any time when most convenient, from early spring to October—the best time perhaps is just after fruiting. Cultivate in hills 12 to 18 in. apart, or in beds 3 feet wide. If kept clean of weeds and grass, the runners often stopped, with moderate space between the plants, fine crops may be expected from either of these modes of culture. A neighbor gathered one season, five bushels of fine large berries, from a bed 10 feet wide, by 100 feet long. Another sold from 70 rods, fifty bushels, besides a family supply. Among fine sorts, well proven here, are "Early Scarlet," Hovey's Seedling," "Burr's New Pine," "Hudson," "Necked Pine," "Crimson Coon," "Willey."

THE RASPBERRY is in many respects preferable to the Strawberry. With some, acids are so harmful as to oblige them to avoid the Strawberry, to such, the Raspberry is peculiarly grateful and healthful. Those who are only acquainted with the sorts in common cultivation, and which are too often allowed to grow without cultivation, know not the deliciousness of the raspberry, as found in the finer sorts, well cultivated. Raspberries succeed best in a light loam, which can hardly be made too rich. They should be planted in hills or stools, four feet apart each way, four plants to a hill—keep clean from grass and weeds. In the spring the old canes should be removed, and the new ones thinned to 4 or 6 canes, cutting out the weak ones. Shorten those left one half, and tie neatly to stakes. Some varieties require protecting in the winter, which is easily done by laying down in October, and covering with a few inches of earth or litter: these may be raised in the spring, after hard frosts are over. They abundantly and delightfully repay this trouble. The following are good sorts, "Red" and "White Antwerp," "North River Antwerp," "Franconia," "Fastolf," "Ohio Everbearing," "Black" and "White American." Several spurious sorts are disseminated as "Antwerps," which are much inferior to the genuine. The "North River Antwerp," is a distinct sort of large size, fine flavor and firm flesh, bearing carriage well. This is a variety cultivated so extensively along the Hudson River for the New York markets—often yielding from five to eight hundred dollars per acre. The "Franconia" is rather more acid, canes stronger, is comparatively hardy, producing crops in sheltered situations, three out of four years,

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without protection—is exceedingly productive, and has thus far proved with us the most at home here; an admirable market variety. The "Fastolf" produces a large handsome berry of excellent flavor, but tender, and will not bear handling. The "Black American" or "Black Cap" is a valuable sort, hardy, uniformly productive, excellent for drying; should be in every garden. There is a difference in this variety as found growing wild, some being much larger and finer than others. The "White American," cultivated sometimes as the "White English," resembles the Black, has a pine apple or perfumed flavor, much admired by many—canes not quite as hardy as the black. The "Ohio everbearing" resembles the "Black American," continues to produce fruit until frost.

The CURRANT in its perfection is one of the most valuable in this class; hardy, productive, of a plesant, acid flavor, and continuing in use a long time. This being a hardy shrub, cultivators too often content themselves with common sorts, and leave them to take care of themselves. They become overrun with weeds and grass, make poor, weak, straggling shoots, with small, uninviting fruit. Few know what fine fruit may be enjoyed by obtaining the large, fine varieties, and then carefully pruning and cultivating them; plant in good soil and work deeply. In early spring prune the bushes, cutting out all superfluous shoots, and old, unproductive branches, shorten last summer's growth one half, give a dressing of manure every fall and mulch around the bushes in the spring. The result will be an abundance of fine large fruit of improved flavor. The best sorts for general culture are the "Red" and "White Dutch," "Champagne" and "Black English" or "Naples." The "white" is less acid than the "red;" the "champagne" is a light, delicate pink, less acid than the "red," more acid than the "white." The "cherry," "Prince Albert," "Victoria." "Knight's Sweet Red," "White Grape," are among the new sorts which promise to be valuable.

The GOOSEBERRY is a favorite and more extensively cultivated in England than in any other country. There every cottager has his gooseberry patch, and emulate each other in producing the largest, finest and most abundant crops. The approved English varieties, owing to our hot and dry summers, are here subject to mildew, which renders them less valuable and requires more care in cultivating. Plant in a deep, rich soil; fork in a good dressing of decomposed manure every fall; mulch in the spring with coarse manure; prune in the winter, cutting out all superfluous cross shoots, and prune long ramblers and straggling shoots to some well placed eye. "Roaring Lion," "Crown Rob," "White Smith," "Red Warrington," "Ironmonger," "White Amber," "Green Ocean," "Bank of England," and "London," are good sorts. But for this climate, none equal "*Houghton's Seedling*," which is said to be a cross between the native wild gooseberry of New England and a foreign variety, and was originated at Lynn, Mass., by Able Houghton, Esq. Houghton's Seedling is deserving of extended cultivation; it is worth more in this latitude, with its hot, dry summers, than all other sorts together. It is of rapid growth, perfectly hardy, and wonderfully productive; its long shoots are annually laden with fruit. Of medium size; dull brownish red in the sun, pale green in the shade; skin thin; flavor peculiarly rich and agreeable. Its crowning excellence is its perfect *exemption from mildew*. This variety should be trained to a frame or trellis, otherwise its long, slender shoots will trail on the ground, and the bushes will thus become unsightly, the fruit imperfect in flavor and difficult to gather. Several spurious varieties are somewhat widely disseminated for this variety; some of them strongly *resemble* the true, but are much inferior; none but the *true* should be cultivated.

PRAYER.

Prayer is the soul's sincere desire,
  Uttered or unexpressed;
The motion of a hidden fire
  That trembles in the breast.

Prayer is the burden of a sigh—
  The falling of a tear—
The upward glancing of an eye
  When none but God is near.

NIGHT.

Night is the time for rest;
  How sweet when labors close,
To gather round an aching breast
  The curtain of repose,
Stretch the tired limbs, and lay the head
Upon our own delightful bed.

Night is the time for dreams;
  The gay romance of life—
When truth that is, and truth that seems,
  Blend in fantastic strife;
Ah! visions less beguiling far
Than waking dreams by daylight are.

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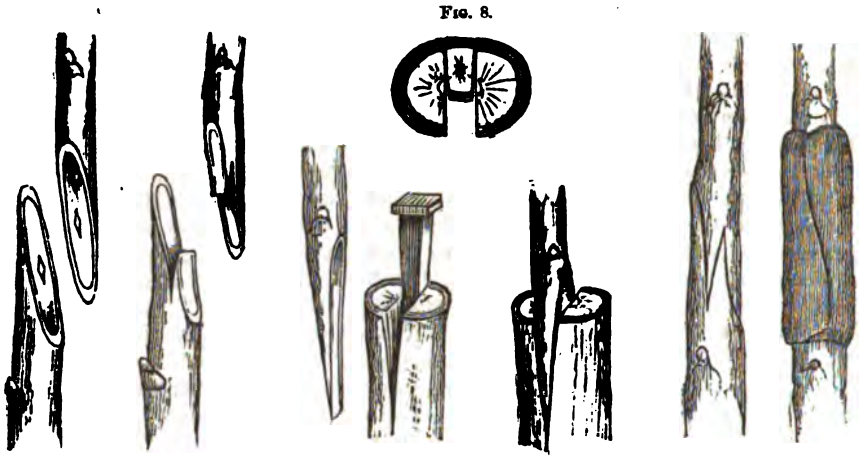

GRAFTING—WHIP OR TONGUE AND CLEFT GRAFTING.

The annexed figures represent the two most common methods of grafting fruit trees; figs. 1 to 4 represent successive stages of *whip or tongue grafting*, from the sloping cut of the scion and stock, to the completion of the operation by the covering with the wax plaster. Fig. 5 shows a stock cut off for cleft-grafting with the upright cleft separated by an iron or steel wedge, ready for the graft; fig. 6, cut wedge-form to fit it; and fig. 7, the graft in its place after the wedge has been withdrawn, the projecting angle of the stock sloped off with a knife, and the whole ready for the application of the wax.

Whip grafting is particularly applicable to small stocks, or where the graft and stock are nearly of an equal size; and cleft-grafting to stocks considerably larger than the scion. In all cases where the stock is in any degree larger, the graft must be placed towards one side, so that the line between the bark and wood may exactly coincide at one point at least in both, as in the cross section of cleft grafting, fig. 8.

The article that follows, from the pen of J. C. Brayton, is just to the point in this connection, and will be of service to those who have spring pruning or grafting to perform. Eds.

For the Farmer.

HEADING DOWN AND GRAFTING ORCHARD TREES.

Hort. Ed. Wis. Farmer—Dear Sir—I have me only to furnish a few brief hints in compliance with your request, in regard to heading down and grafting orchard trees.

The leading upright branches only should be removed this season; if more than one-half the *leaf-bearing* capacity of the whole tree is removed, blight is quite sure to follow during the first or second season following the severe check thus given. By engrafting only the leading uprights this season, the vigor of the side branches will be increased, and will prepare them to sustain and nourish a vigorous growth of the scion inserted the following spring.

As a general rule, all branches over an inch in diameter should have two scions inserted in the cleft; all under an inch, one; and if any require working to maintain the balance of the head, which are less than five-eighths of an inch, whip grafting is the best.

The scions should not be less than one-fourth of an inch in diameter, and should be sharpened two inches or more of their length, according to the size of the stock to be used for their insertion. A large stock will be found in practice to require a long, attenuated slope, or the faces of the cleft will only bear upon it near the upper portion. A little practice will enable the operator to gouge the point of the scion to meet the requirements of the stock in hand. The inner bark of scion and stock should perfectly coincide, and the pressure should be as nearly uniform as possible, the whole length of the parts united.

Rosin 6 pounds, bees wax 1 pound, and

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linseed oil 1 pint, melted together, form a good wax; with this every wounded part should be covered, and all cracks should be mended once in two weeks until midsummer.

The sprouts from the stock should not be rubbed off as fast as they appear, unless the wish is to kill the stock before the scion can furnish sufficient *lungs* (leaves) to ensure continued health and vigor. They should be stopped by pinching where they intrude on the *air room* of the growing scion.

Very truly yours,

J. C. BRAYTON.

AZTALAN, Feb'y 24, 1856.

SHEBOYGAN, March 1, 1856.

HORT. ED. WIS. FARMER: DEAR SIR—Without much experience in grafting large trees, we attempted last spring to change the product of a tree labeled "Green Everlasting." It had been planted eight years. It was a good tree; a handsome tree; and nothing short of an inexorable hatred for poor fruit enabled me, without compunction to bring its head to the ground. With a sharp back saw, I cut off all the limbs, and in their places inserted some twenty scions. The work was done in my best style, and the scions all lived and grew—from three to ten inches! Why, I expected the least of them to attain a length of three feet or more. "Phansy my pheelings!" I cannot pass that tree without a shiver. It is a standing reproach to my heedless haste. Now, Mr. Editor, I have another fine tree which is down in my book as "Swazey." It comes from Ohio. In *Ohio* it may be a very nice apple. I won't dispute the fact; but I do say that it is a miserable fruit in Wisconsin. It must be grafted over, so pray tell me how to proceed. Shall I take off only half the top this season? Had I better graft the upper or the lower branches first, or——how? Yours truly, M. L.

There are thousands of trees in the orchards of Wisconsin, which, like the "Green Everlasting" and the "Swazey" should be headed down and grafted with sorts of the best quality. We are happy to refer our correspondent and others to an excellent article on another page of this number, on Orchard Grafting, from the pen of our friend Mr. J. C. Brayton. *

PLANTS FOR SHELTER—NO. 2.

The particular end to be accomplished by a screen, and the particular place to be planted, ought of course be well considered, and should in every case determine the choice of the plant to be used. We name those which, in our opinion, are well adapted to the defense of the fruit or flower garden, and the grounds in the vicinity of the dwelling.

The American Arbor Vitae is, for this purpose, unexceptionable. Bushy plants from the nursery, from 18 to 24 inches high, are the best. If planted in a good soil, and well cultivated, they will in eight or ten years make a screen ten feet high, impervious to the wind, and beautiful to look upon. They should be planted 2 1-2 to 3 feet apart, and a border at least five feet wide. If the soil is heavy or poor, dig in a thoroughly rotted compost of muck and manure. Mulch the border with short, half rotted litter from the barn yard. Use just enough to keep the ground shaded and cool, and *not* so much as to render it sodden and unwholesome. If the expense can be afforded, by all means *trench the border*. The plants, such as we have described, may be had in the nurseries in western New York; cost, from $10 to $15 per hundred.

The Red Cedar will shield a plantation from the wind as effectually as a brick wall. It is generally considered a slow grower, but with good soil and good culture, it gets up about as fast as any evergreen we know. It will not stand the knife as well as the Arbor Vitae, but it is only necessary to take the points off some of the leading shoots to keep the screen of uniform height, and this may be done without harm. Plants of 12 inches high are the best; these should be planted from 2 to 2 1-2 feet apart, and in other respects treated as the Arbor Vitae. The sort of cedar we have "in our eye," is one upright and pyramidal in its habit, and common on the banks of the Hudson River. There is a variety growing in this State, with branches spreading and nearly horizontal, which may properly be planted 4 feet apart. Very handsome plants from the seed, and of a suitable size, are occasionally met with in the eastern nurseries, but it has not yet received a tithe of the attention it deserves.

The Hemlock would make a magnificent

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wall of foliage. We can think of nothing finer in the way of a screen than this. We have seen very beautiful hedges of the Hemlock, but, out of the woods, have met with no specimens over seven or eight feet high, and cannot say how long it would take, with plant of a given size, (18 to 24 inches is the best), to grow a screen to the height of ten feet. The hemlock is more common in European than in American nurseries. The best plants we have seen were at "Houghton's," near Cleveland, and if we mistake not, he informed us that they were "*imported!*" Where the grounds to be sheltered are pretty extensive, the

Norway Spruce will answer the purpose under consideration admirably. Well furnished plants of 18 to 24 inches should be chosen and planted four feet apart. These may be had at the nurseries at from $15 to 20 per hundred, and with good treatment they may be grown in six or eight years to the height of ten feet. When well established, they will grow two or three feet in a single season. The subject will be continued in the next No. of the FARMER. *

PREPARING WHEAT FOR SOWING.

MESSRS. EDITORS—As it is near the time for sowing wheat, and thinking all farmers ought to know how to prevent it from smutting, I send you the following recipe: Take 2 oz. sulphate of copper, and dissolve it in 2 quarts hot water, for one bushel of wheat. A less quantity of sulphate of copper will not prevent smut in all seasons. The wheat should be wet with cold water, and drained off; then pour on the *vitriol water* while hot, and stir briskly; then it should be poured into a box that will contain 8 or 10 bushels, and allowed to stand about 10 hours, but six hours will do when the farmer is in a hurry. Try it, farmers, and I will warrant you no smut. J. INGALLS.

SUN PRAIRIE, March 30, 1856.

For the Farmer.

SAUK CO. AGRICULTURAL SOCIETY.

This Association met at the office of the Clerk of the Board of Supervisors, in Baraboo, on the 15th ult., and elected the following officers for the ensuing year:

President—Ralph G. Camp, of Baraboo.

Vice-President—Isaac W. Morley, of Freedom.

Treasurer—Richard H. Davis, of Baraboo.

Secretary—Warren C. Waite, of Baraboo.

And an Executive Committee consisting of one member from each town.

The Society is in a flourishing condition, with a surplus fund of $135. They have adopted energetic plans for the future, and hope to set an example worthy of imitation by older counties in the State.

W. C. WAITE, Sec'y.

BARABOO, March 25, 1856.

ST. CROIX CO. AGRICULTURAL SOCIETY.

HUDSON, March 8, 1856.

Pursuant to a call published in the North Star of Feb. 27, a large number of the citizens of St. Croix County interested in Mechanical and Agricultural pursuits, met at Hendee's Hall, for the purpose of taking the preliminary steps towards organizing a society.

The meeting was called to order by J. D. Henning Esq., and on his motion Alfred Day was appointed Chairman, and T. Dwight Hall, Secretary.

After a statement of the object of the meeting by the Chairman, it was on motion—

Resolved, That a Committee be appointed consisting of two from each town in the county, to prepare such a constitution and by-laws as they may deem necessary for the purposes of the contemplated organization, and submit the same to the next meeting.

The following gentlemen were chosen such committee:

Miles H. Lewis, Daniel M'Cartney,	Rush River.
Lewis Perrin, Wm. A. Tozer,	Kinnickinnic.
C. B. C. Foster, James Crowns,	Star Prairie.
James Walstow, P. D. Aldrich,	Hudson.

Remarks were then made by several gentlemen, recommending that the three counties of the St. Croix valley unite their efforts and form a single society; whereupon on motion it was—

Resolved, The above committees be authorized to confer with the farmers and mechanics of the counties of Polk and Pierce, and endeavor to obtain their co-operation in this enterprise; and also that an invitation be and is hereby extended to them, to appoint committees to act with the one appointed for this county in drafting a constitution and by-laws. On motion, the meeting then adjourned for three weeks to such place as the committee may appoint by notice in the country papers. T. DWIGHT HALL, Sec'y.

☞ A German on Pittsburgh Street, wishes that he can supply buttermilk daily, and shews his sign thus:—"Buttermilk *every time.*

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STATE UNIVERSITY.

The report of the Board of Regents, and accompanying documents, of this Institution is before us. It shows the University to be in a prosperous condition, financially and otherwise. Financially, we consider their affairs have been infinitely better managed, than any other public institution in the State, —especially any one with which the State government has anything to do. So far, the endowment seems to have been kept clear of political swindling, or individual speculation. But on the other hand, by a judicious and prudent policy, looking to the permanent interests of the institution, the value of its property has been vastly increased. Had the common school fund of the State been managed equally honestly and capably, who doubts but its present value would have been at least twice what it now is. We have long been of the opinion that less complaints in relation to University management would be heard if its affairs were more available for the ends of demagogueism. But let that part of the subject pass for the present.

Its educational facilities have been greatly increased by the installation of its new professors, and the completion of its Laboratory, and chemical apparatus. Under the management of Dr. Carr, distinguished as an agricultural chemist, we may look for valuable practical results to the farming interests of the State. The class in Agricultural Chemistry, to be formed for the summer term, must be a special attraction that will add many students to its lists. We purpose to be a listener to the course, and hope to see many of our young prospective farmers also present.

The establishment of a permanent department, to promote the practical science of agriculture, is of great importance, and we hope to see it appreciated and prospered, and doubt not we shall.

The arrangements for boarding students in the institution at the common table with the Faculty, at the remarkably low price of $1,75 per week, is a desideratum of great importance, and will have a favorable influence in filling up the institution and classes. We are among those who hope and expect to see the State University prosper, until it becomes the pride of the State and west.

And we would say to those who profess to be its friends, if they really wish to do it good service, to look well to the filling of its board of Regents, from year to year. Leave out men who have no business capabilities, and put in those who have; drop the mere politician or old fogy, and replace him with a thorough-going, reliable, business man, who has no local antagonistic schemes of his own. Under a board of Regents thus made up, we will warrant the University to prosper; for whatever errors there might be in its management, would soon be corrected. If more steam was wanted to keep up with these fast times, it would soon be applied. The Board of Regents, we repeat, are the fountain source of the University; and if they are men of straw, the products of the institution will be chaff; here and here alone lies the remedy, if a remedy is needed.

For the Farmer.

TO THE WISCONSIN GIRLS.

There is so much said now-a-days on the subject of "female vanity," that you all ought to do your best to disprove the assertion. A woman cannot have a pleasant parlor in which to see her friends, without, forsooth, she is vain! she will ruin her husband! This has been the talk of so many that the press has gone after them; some silly, puerile women in the city have spent their all on a magnificent room, and too many others have tried to do the same, till the quiet old "best room" has been confounded with the splendid nothings of the city. Are they not wrong?

I have not said this because I wish you to spend everything on fitting up a room, with soft, flowery carpet, astral, piano, mirrors, sofa and chandeliers. I despise those things when obtained at the cost of necessaries, or comforts for other rooms. When a parlor is to be had at the expense of fruit or grapes, it is, to say the least, a poor bargain.

But *must* a parlor be so elegantly furnished, so expensively fitted up, as to be useless, or sinvolve other things more needful? Cannot a room be set apart for the farmer to meet the railroad agents or collectors or nurserymen in—for the farmer's wife to hold sewing societies in—where Jennie and Carrie can sit hand in hand with Charley Pratt and Allie Lindon, their old playfellows, to answer the question of all others—where Tom and Fred and Jimmy can hold read-

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ing societies and practise on the flute, without this extravagant outlay of time and money? It can be done, and I have written this to tell you how it may be done,—how every Wisconsin girl can make a pleasant, tasteful, yet simple looking and cheap parlor, of a five dollar bill.

Save your rags, your old pants, coats and dresess, for carpet rags. When a sufficient number are collected, make them into balls, and have them woven—a dark ground, with stripes of red, yellow and blue at intervals. I have seen rag carpets look nicer than many an ingrain. Don't turn up your noses; your friends come to see you, not your carpet. If it is kept clean and free from grease spots, it will do plenty well enough. If in the course of time you get a nice Brussels, Wilson or three-ply, I dare say you will feel no better than when you trod on rags. The chairs may be either cane-seat, splint or flag bottomed. A little toilet stand, with a red woolen cover, or blue cotten, or white netted one, might be placed cat-a-cornered, in one corner of the room. A lounge may be made easily thus: Have a frame three feet wide and six long made at the nearest mechanic's. It should be twenty inches high from the floor. Nail a piece of sacking of sufficient size round the edges. Fold an old quilt up to make it soft. Cover this with red, unglazed curtain calico, with yellow, green or brown figures. A pillow, stuffed with straw or feathers may be added at each end; these should be tacked down to the frame. A lamp may stand in the centre of the table, on a little mat. Shells, dauguerreotypes and books may be ranged about it. A vase or glass cup on each end of the mantle-piece make a pretty ornament; they should be filled with flowers in spring, with gay, withered leaves in autumn. Dried grasses will fill them in winter. A shell, crystals, snail shells, and curious pebbles gathered in a walk, will look well in white saucers. A pair of brass candlesticks, polished nicely, will prove a pretty ornament. Brick covered with cloth for footstools will be convenient. The walls will look rather bare till a picture or two can be added. Curtains of white muslin and red chintz for the windows will cost but two or three dollars. They should be draped with vines in summer.

Could not every one have such a parlor? Girls, one more suggestion. How many of you could take charge of a household?—*Could* you make the good butter, nice cheese, and white, light bread? You could if told when to press, how long, how hot the milk should be; if told how much salt and yeast to put in, when to put in the oven, when to take out. The parlor is for recreation, for rest, not for an abiding place. I would make a rule not to enter the parlor till I could make a cheese *alone*,—till I could make good bread *all alone*. Then, and not till then, should I cross the threshold.

I have told you how to furnish a parlor simply yet tastefully; but do not center your thoughts on it. One may be a useful and honorable member of society, without even a parlor. I only showed one way of furnishing a room; I did not say it is an absolute necessity, but a pardonable luxury. It is the fault of American women to be extravagant, but it is possible to be elegant without this extravagance.

HILDRED, THE HOUSEWIFE.

AN IRISH MELODY.

Dance light, for my heart is under your feet, Love!

BY JOHN FRANCIS WALLER.

"Ah sweet Kitty Nell, rise up from that wheel—
Your neat little foot will be weary from spinning—
Come trip down with me to the sycamore tree;
Half the Parish is there, and the dance is beginning.
The sun has gone down, but the full harvest moon
Shines sweetly and cool on the dew-whitened valley,
While all the air rings with soft loving things,
Each little bird sings in the green-shaded alley."

With a blush and a smile, Kitty rose up the while.
Her eye in the glass, as she bound her hair glancing;
'Tis hard to refuse when a young lover sues—
So she couldn't but choose to go off to the dancing;
And now on the green the glad groups are seen—
Each gay hearted lad with the lass of his choosing,
And Pat, without fail, leads out sweet Kitty Nell;
And somehow when asked she ne'er tho't of refusing.

Now, Felix Magee put his pipes to his knee,
And with motion so free sets each couple in motion;
With a cheer and a bound the lads patter the ground,
The maids moving round just like swans on the ocean.
Cheeks bright as the rose—feet light as the doe's
Now coyly retiring, now boldly advancing—
Search the world all round from the sky to the ground,
No such sight can be found as an Irish lass dancing.

Sweet Kate, who could view your eyes of deep blue,
Beaming humidly through their dark lashes so mildly,
Your fair turned arm, heaving breast, rounded form,
Nor feel his heart warm, and his pulses throb wildly?
Young Pat feels his heart, as he gazes depart,
Subdued by the smart of such painful sweet love:
The sight leaves his eyes as he cries with a sigh—
Dance light for my heart lies under your feet Love!

MEN OFTEN blush to hear what they are not ashamed to act.

THE WORST feature of a man's face is his nose—when stuck in other people's business.

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DEATH.

Soon may this fluttering spark of vital flame
Forsake its languid melancholy frame!
Soon may these eyes their trembling lustre close,
Welcome the dreamless night of long repose;
Soon may this woe-worn spirit seek the bourn
Where, lull'd to slumber, grief forgets to mourn!
Campbell.

Death! to the happy thou art terrible,
But how the wretched love to think of thee,
O thou true comforter, the friend of all
Who have no friend beside. *Southey.*

Happy they!
Thrice fortunate! who of that fragile mould,
The precious porcelain of human clay,
Break with the first fall: they can ne'er behold
The long year link'd with heavy day on day,
And all which must be borne, and never told.
Byron.

Great God! how could thy vengeance light
So bitterly on one so bright?
How could the hand, that gave such charms,
Blast them again? *Moore.*

See on these ruby lips the trembling breath,
These cheeks now fading at the blast of death;
Cold is the breast which warm'd the world before,
And those love-darting eyes must roll no more.
Pope.

Let music make less terrible
The silence of the dead;
I care not, so my spirit last
Long after life has fled. *Miss Landon.*

There comes a voice that dissipates
The gloom that 'round my spirit hovers;
In Death my soul anticipates
The rising veil that Life discovers.
A. J. Mackey.

THE COUNTRY ABOUT FOND DU LAC.

Our late Ohio friend, S. H. Grennell, who moved two years ago from near Cardington, writes of the Country about Fond du Lac, Wis.:

"I think we have as good a country as can be easily found of its age. It is as thickly settled as it is in Morrow Co., O.,—good schools—we pay a teacher thirty-one dollars a month and board himself. I never saw such crops of wheat, potatoes, oats and garden vegetables during the 18 years I lived in Ohio. I raised about 10,000 Osage Orange plants from the quart of seed bought of you. It would make your mouth water to see the nice pickerel we catch in Lake Horicon, some as heavy as 20 lbs., and if I did not suppose your sporting days were over, I would invite you to give us a call and help yourself, now that we are connected with the rest of the world by Railroad."

Ha! Grennell! our "sporting days over," eh? You should see us in the saddle for a bender, with one of our troops; and as for fishing, many is the time we have cruised all night with torch and spear, picking up pickerel. They are a mighty shy bird, and not half so easily taken as a mullet. It's more than half likely we'll put an oar in Lake Horicon some day. [Ohio Cultivator.

Cookies.—One teacup of butter, two of sugar, two eggs, four tablespoonsfull of sour milk, one teaspoonful of pearlash put into the milk with spices. [Ohio Farmer.

DOMESTIC ECONOMY.

Scientific Mode of Making Excellent Light Bread.—To make eight loaves the size of baker's bread: Take a pint of baker's yeast, or good home-made yeast, made by boiling a handfull of hops in three pints water, strain hot on two spoonfulls flour, two of sugar, a teaspoon of salt and one of ginger, and a tincupfull finely mashed and strained of Irish potatoes. When cool, add your yeast, and let it set till it rises; then have two or three pints of mashed potatoes made thin with hot water; stir in it a little flour while hot; when it cools, add a teacupfull of yeast, set it to rise over night, and if it is kept warm, it will be all of a light foam in ten or twelve hours; this forms the sponge too for the bread; now have ready some lime water, made by pouring three pints water on one pint lime; take of this lime water and add to your sponge to make as much bread as you wish; add more salt, and work the dough well half an hour; set it to rise; when it cracks open, knead it well again, form into loaves, let it rise, and if you wish the crust tender, rub the loaves with butter, just as you would rub the outside of cheese, and if you want, you can put in a spoonfull of lard; it will rise in the pans in about half an hour, then bake; when done, roll it up in a damp cloth, and set it up till wanted; if the flour is good, and these directions followed, you will have beautiful, white and healthy bread; sugar and eggs worked in the sponge will make nice rusk; if you have more dough than you want to make, cover it with flour, and set in a cool place, and it is always ready to have hot rolls. If you fear it is sour, put in more lime water. Mrs. C. H. Price, in Ohio Farmer.

A "Farmer's Wife" communicates the following recipes to the Ohio Farmer with the remark—"I have tested the virtues of all these recipes and warrant them good:"

For an Excellent Indian Pudding.—Take a pint and a half of sweet milk; put it on the fire; when it boils, stir in a pint of meal; then take it off; put in a teacupfull of sour cream, with half a teaspoonfull of soda, (saleratus will do); beat three eggs; when it is cool enough not to cook the eggs, put them in; put in a handfull of ripe fruit, (currants, cherries, plums or something else); then stir in flour enough for a thick batter, and bake it three-quarter's of an hour; either put in three tablespoonfulls of sugar, or eat with sweetened cream—the former is preferable.

Minute Pudding.—If you have some stale bread on hand, you can make a cheap, quick pudding before breakfast, thus: Put a pint

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of sweet milk in the frying-pan: cut the bread up in it, put in a tablespoonful of sugar, and a teaspoonful of allspice; a little nutmeg will help it; let it boil; as soon as the bread is soft, stir in an egg, and it is done. Try it, and if you don't find it excellent, tell me so.

A Very Quick Dinner, and a good one, too—for instance, on washing days, when the women don't want to be bothered—is to put a quart of sweet milk on the fire; mix two or three handfulls of flour in a dish, with milk enough to wet it as you would for starch; make it smooth with a spoon, so that there will be no lumps in it; when the milk boils, stir this in; beat three eggs, and stir them in, and two tablespoonfulls of sugar, and it is done. Eat it with butter, if you choose.

To Make Sausage.—To 30 lbs. meat, add 10 oz. fine salt, 3 oz. sage, 1 1-2 oz. pepper, 2 oz. cinnamon, and mix well together. Apply it to the meat before chopping.

Pot Cheese.—There is another dish, when one is scarce of sauce, that we use a great deal. Take a crock or two of thick milk; put it on the stove, stir it once in a while; let it get milk warm, and no warmer; take it off, and pour it into a thin bag; hang it up five or six hours, so that the whey will all run off; then take a bowlfull, and put on enough sour cream to make it quite soft, and it is good, and certainly cheap.

Stewed Celery.—The Horticulturist recommends highly stewed celery. Cut the blanched or white portion of the celery stalks in pieces about an inch in length, and put them in a sauce-pan over the fire, with milk and water, in equal proportions, barely sufficient to cover them; add a little salt and let them stew gently, until perfectly tender. Then take out the celery, add a piece of butter to the liquor it was boiled in, thicken it slightly with flour, pour it over the celery, and serve it up.

Vegetable Seasoners.—Parsley, celery, thyme, sage, onions, garlic, and other seasoners, should not be put into soups or stews until the soup is nearly done; chop fine, and put in five minutes before the soup is taken from the fire.

Indian Muffins.—A pint and a half of yellow Indian meal sifted. A handful of wheat flour. A quarter of a pound of fresh butter. A quart of milk. Four fresh eggs. A very small teaspoonful of salt. Put the milk into a saucepan. Cut the butter into it. Set over the fire and warm it until the butter is very soft, but not until it melts. Then take it off. Stir it well till all is mixed, and set it away to cool. Beat four eggs very light; and when the milk is cold, stir them into it, alternately with the meal, a little at a time of each. Add the salt. Beat the whole very hard after it is all mixed. Then butter some muffin-rings on the inside. Set them in a hot oven, or on a heated griddle; pour some of the batter into each; and bake the muffins well. Send them hot to table, continuing to bake while a fresh supply is wanted. Pull them open with your fingers, and eat them with butter, to which you may add molasses or honey.

How to Make No-Matters.—This is an article of food which has for many years been confined to the descendants of a single family. Its excellence will commend it to the attention of those housewives who wish to make a good display of culinary skill upon their tables, at the same time having due regard to economy. The lady who furnishes the receipt has given frequent opportunities of tasting their delicious flavor; and if any are inquisitive, perhaps she might be induced to inform them how the cakes obtained their homely name. "To three teacupfulls of buttermilk, add three tablespoonfuls of rich cream, and a small quantity of sugar. Stir in flour until it is of the consistency of paste for doughnuts. Roll out size of a large breakfast plate, and fry in lard to a rich brown color. As each cake comes from the fire, cover with apple-sauce made from tart apples sweetened to taste, and spiced with nutmeg or cinnamon, and continue the process till the plate is well heaped."

Use of Salt in Cooking Vegetables.—Here is something everybody out to have known long ago, and that everybody should now read and remember: "If one portion of vegetables be boiled in pure distilled or rain water, and another in water to which a little salt has been added, a decided difference is perceptible in the tenderness of the two. Vegetables boiled in pure water are vastly inferior. This inferiority may go so far, in the case of onions, that they are almost entirely destitute of either taste or color, though when cooked in salted water, in addition to the pleasant salt taste, a peculiar sweetness and a strong aroma. They also contain more soluble matter than when cooked in pure water. Water which contains 1-420th of salt is far better for cooking vegetables than pure water, because the salt hinders the solution and evaporation of the soluble and flavoring principles of the vegetables.

[Scientific American.

M. Renault, director of the Veterinary College of Alfort, France, recently gave a banquet, at which a large number of medical men and others partook of horse-flesh, prepared in various ways, and they all pronounced it excellent.

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EDITOR'S TABLE.

STATE AGRICULTURAL SOCIETY.—On another page will be seen the Premium List, and Regulations for the sixth Annual Fair of this Society, to be held at Milwaukee on the 8th, 9th and 10th of October next. Upwards of $4,000 of cash premiums are offered, which is certainly very handsome for so young a State. The number of railroads centering into Milwaukee, and the well known liberality of their able managers in aiding these great popular, and truly democratic gatherings of the people, together with the proverbially liberal spirit of the Milwaukeeans themselves in all such public doings, seems still to mark that city as the place at which to rally for these great annual agricultural jubilees. Though geographically at one side, practically, it is central and convenient; more especially so from its ample capacity to accommodate a crowd, which, by the way, is a highly important matter on such occasions.

We hope the liberal Premium list, with other favorable attendant circumstances, will draw together a company more numerous and respectable than has ever before been seen in the State, and a show of animals, arts, and manufactures, that will do the Badger State credit.

In this connection we would also refer to the law recently passed for aiding County Agricultural Societies, a copy of which we herewith subjoin:

"AN ACT FOR THE ENCOURAGEMENT AND PROMOTION OF AGRICULTURE. The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SEC. 1. It shall be lawful for any number of persons, in any county in this State to associate together and form a county society, to encourage and promote agriculture, domestic manufactures and the mechanic arts therein; and any such society, when organized according to the provisions of this act, shall have all the powers of a corporation or body politic, and may sue and be sued, implead and be impleaded, prosecute and defend to final judgment and execution, in any court of law or equity; and may purchase and hold all the real and personal estate which shall be necessary to best promote the object of such association, and which estate shall be exclusively devoted to such object.

SEC. 2. Such societies shall be formed by written articles of association, subscribed by the members thereof, specifying the objects of the society and the conditions on which subscribers shall become members thereof; and the first meeting shall be notified and held in the manner prescribed in the articles of association. They may adopt a corporate name, either in the original articles of association, or by vote at the first meeting thereof, in which such society shall be organized, and may at any meeting adopt a corporate seal and alter the same at pleasure.

SEC. 3. Such societies, not exceeding one in each county; shall be organized by appointing a President, Vice President, Secretary and Treasurer, and such other officers as they may deem proper, to be chosen annually, and to hold their places until others are appointed.

SEC. 4. When any such societies are organized as aforesaid, they shall have power to adopt all such by-laws, rules and regulations as they shall judge necessary and expedient, to promote the objects thereof, not inconsistent with the constitution and laws of this State.

SEC. 5. It shall be the duty of every such society, to keep correct records of all the proceedings of the same in a book provided for that purpose, and such records may be read in evidence in any court where the interest of such society is concerned.

SEC. 6. When it shall be made to appear to the satisfaction of the Secretary of the State, that any such society is duly organized in any county according to the provisions of this act, it shall be the duty of the said Secretary of State to issue an order to the Treasurer to pay annually to the Treasurer of any such duly so organized, as aforesaid, on application made therefor, the sum of one hundred dollars; *Provided*, nevertheless, that no such society shall draw any money out of the Treasury of this State, as aforesaid, in any year until it shall also be further made to appear to the satisfaction of the Treasurer thereof, that there shall have been subscribed and paid into the treasury of such society for the sole use and benefit thereof, for the year in question, a sum not less than one hundred dollars.

SEC. 7. All moneys so subscribed or received from the State as aforesaid, shall after paying the necessary incidental expenses of such societies, respectively, be annually paid out for premiums awarded by such societies, in such sums and in such way and manner as they severally, under their by-laws, rules and regulations shall direct, on such live animals, articles of production and agricultural implements and tools, domestic manufactures, mechanical improvements and productions as are of the growth and manufacture of the county; and also on such experiments and discoveries, or attainments in scientific or practical agriculture as are made within the county where such societies are respectively organized.

SEC. 8. Each county agricultural society entitled to receive money from the State Treasury, shall through its Treasurer transmit to the Treasurer of the State, in the month of November, annually, a statement of the money so received from the State, together with the amount received from the members of said society, for the preceding year, a statement of the expenditures of all such sums, and the number of members of such society.

SEC. 9. Each county agricultural society receiving money from the State, as aforesaid, shall publish in the month of January of each year, at their own expense, a statement of the experiments and improvements, and the reports of committees, in one or more newspapers in the county where such society is located, or in an adjoining county when no paper is published in the county where such society is located, and evidence that the requirements of this act shall have been complied with, shall be furnished to the State Treasurer before he shall pay over to any county society the sum appropriated by the State for the benefit of said society.

SEC. 10. Live animals, the growth of any foreign State or country, which have been owned and kept in any county in this State for the term of six months, previous to its annual agricultural fair, are hereby placed on the same footing, and may receive the same premiums thereon, as live animals which are the growth of such county.

SEC. 11. This act shall take effect from and after its passage.

This act is another step in the right direction, and will undoubtedly inspire the spirit, and prompt the organization of Societies in all the thriving counties of the State. The hundred dollars received from the State will essentially aid the weaker counties, and prompt all to renewed effort. We are not among those who think that money judiciously paid for the encouragement of agriculture is thrown away. On the other hand, we believe that a great deal more of it ought to be used for such purposes, and less for many other things of far less consequence.

We would say to every partially settled county, organize your County Agricultural Society as early as may be the present season—so that your Farmers and handicraft

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men and women may be laying their plans, and getting up animals and articles for exhibition.

When you have organized send us in your list of officers, and important proceedings, and we will publish them as far as possible in the FARMER, "free gratis"—or, the only pay we ask is that such of you as take the FARMER will show it about at your conventions, fairs, and "public doings," and get everybody to subscribe for it that ought to. And further, that you make Fair Premiums of it as far as possible—and what can you give a man that will do him so much good (if he does not already take it) for six shillings, as a copy of a good agricultural paper?

Don't fail then to organize the County Agricultural Society early, and to sustain it well when organized. It will add more to the general prosperity and welfare of the county than anything else you well can do.

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PATENT-OFFICE SEEDS.—In reply to numerous inquiries in relation to Patent Office Seeds, we would say that they have not yet come, although we are looking for them every mail, and have been for three weeks. After receiving assurance from the Department that an ample stock would be forwarded early, we wrote to our members to see to it—since which we have heard nothing from the seeds, or them, except the following letters from the Hon. CHARLES DURKEE and the Patent Office:

WASHINGTON, March 12, 1856.

DEAR SIR—Yours of the 22d ult. was duly received. I called at the Patent Office and made known your requests in regard to sending seeds to the "State Agricultural Society of Wisconsin." Assurance was given that seeds and books would be forwarded as desired.

Respectfully Yours, CHARLES DURKEE.

GEO. O. TIFFANY, Esq.

U. S. PATENT OFFICE, March 3, 1856.

DEAR SIR—Senator DURKEE has handed your letter of the 22d ult. into the office. In reply I have to say that Agricultural Societies will be supplied with every thing (latitude, &c., considered), that the office receives for experiment. Only shallots and Haws have been sent as yet. Owing to the lateness of the orders sent abroad, and the badness of the season, we have only received about a quarter of the supplies expected. When bundles are sent, circulars will accompany them, stating contents, etc.

Very respectfully, C. MASON, Commissioner.

GEO. O. TIFFANY, Esq.

We think they must be along soon, and had hoped they would have been in time to have been forwarded to various individuals by the returning Members of the Legislature. We will forward them when they arrive, in any way that members of the Society wishing them may direct us.

—

THE ANNUAL REPORT of the Madison Mutual Insurance Company, for 1855 will be found in this number of the FARMER. It shows the company to be in a healthy and highly prosperous condition, with a large actual balance on hand to meet occurring losses. We have for some time past deemed it the best farmer's company in the State, and have had our own house insured in it for the sum of $2,000, for nearly two years, during which time we have been called on for no assessment whatever, which is better than we ever fared in any other company. In fact, this company has never yet made an assessment during its whole five years of business, which to say the least is highly creditable to its management. We have said before to all to insure, and we now say we don't believe there is a better company than this for farmers to go into. We speak with the more assurance because we are well acquainted with the officers and business of this company, and know it to be reliable and right.

THE DISCOREA BATATAS, Japan Pototo, or Chinese Yam, which certain widely known gentlemen have been taking so much pains to blow up of late to speculative dimensions, bids fair to have a shorter run than did the Rohan, or Morus Multicaulis, in its day. It is just as we expected—articles that are recommended so remarkably high generally prove to need it in the end. In a recent number of the New York Tribune we notice a reference to this *remarkable new esculent*, by the American Institute Farmer's Club A letter was read before them from a gentleman who had resided in China many years, showing that it is not extensively raised in China. After various remarks in relation to the climate, &c., of China, it concludes as follows: "From all this it will also appear that the Yam, however valuable in an appropriate climate, is not probably adapted to the temperature of our country north of central Virginia, since nearly all of China, where the Yam is asserted to be cultivated freely, is south of that point." Solon Robinson fully concurred in this opinion; he thought it might be a valuable plant for Florida but not for New York. Under all the circumstances of the case, we would advise people to hold on a year or so before buying many *Batatas* tubers at $1,00 apiece.

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HORTICULTURE and Horticultural illustrations rather predominate in this number, for the reason that we consider it the season when that class of subjects ought most to engage the attention of our readers. Everything should come in its season. We shall soon be presenting some fine illustrations of the premium animals of the State, including its best horses, cattle, &c. We hope hereafter to present all the first class premium animals, exhibited at the fairs, in successive numbers—as models to be studied by our young farmers. In this and in divers other ways, we hope to make our new relation with the State Agricultural Society an interesting and profitable one to our readers. We shall not aim at any time, to get up illustrations simply for the sake of pictorial ornaments, as we do not suppose many of our readers to be children who wish to be amused with unmeaning pictures. But, on the other hand, we shall spare no reasonable pains, or expense, to illustrate everything that is made more clear and comprehensible thereby. Among other things we present part of the Plum family, this month, including some of the most popular varieties. The balance will appear in the May number. In the May number we intend to illustrate the Strawberry family—a family, by the way, for which we have a very affectionate regard, especially when in the fond embrace of cream. The illustrations for budding will come along in season.

—

WISCONSIN FRUIT GROWER'S ASSOCIATION.—The transactions of this Association are received, and have been perused with interest. The Association has gone prosperously through the past year, and is evidently doing a good work for the State and west. A better knowledge of the fruits adapted to our soil and climate is what we most need, and there is no school in which this can so well be learned as by the exhibition and comparison of choice fruits, and the free discussion of their various merits and successes by those who actually cultivate with their own hands. The Association embodies much of the best horticultural talent of the State—men who are zealous in the work in which they are engaged. The "F. G. A." will ever have our best wishes and earnest support.

—

LOCUST SEED.—We refer all wishing this article to the advertisement of H. F. BOND, who is supplying all applicants, not only with this, but with many other choice and rare kinds enumerated.

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A SUBSCRIBER, who wishes to be informed what are the requisite rules in writing for the FARMER, is informed that nothing more is necessary than to write plain, with or without punctuation, and always as directly to the point as possible, and with as few surplus words.

As to the other question, we would say that a light, sandy soil, with loose, sandy subsoil, is not just the thing for an apple or pear orchard, but may do with a good deal of manure. It will be good for peaches perhaps.

F. W. J.'s ENQUIRIES will be answerd in the May No.

L, of Sun Prairie, will find his queries in regard to orchard planting, and the best kind of fruits for our State, answered in the Horticultural Department.

J. Mc.'s ENQUIRY will be answered in May No.

R. P. enquires how to cook the purple egg plant. Perhaps some reader of the FARMER can answer.

NOTICE TO FARMERS.—BOWEN & CHURCH advertise in this number a supply of clover, timothy and garden seeds —which those in this vicinity, in want of any thing in their line, will do well to notice.

GODEY'S LADY'S BOOK.—This old and excellent magazine, as usual, is ahead of any of its competitors. The April number reached us about the 15th of last month, and its contents and illustrations are as attractive as ever. The charge of light reading against some of the eastern magazines will hardly stand against this. We notice several articles of sterling merit, from the pens of its regular correspondents.

COFFEE TREE.—We would call the attention of those who purpose cultivating timber, to the description of the coffee tree, by I. A. Lapham, under the head of "Forest Trees of Wisconsin." It strikes us as a variety well worth cultivation for timber and fuel; quite equal, perhaps, in most respects, to the Locust, and not subject to being destroyed by the Borer, which is rather an objection to the Locust.

CAUTION.—We would caution those buying fruit trees to examine them with extra care, to see that they are not injured by the winter. That its severity has killed great quantities of youngerly trees in the nurseries is certain. Cherry and Pears, and especially Dwarf pears will need close examination. We recently examined about 1,000 of our own young trees from four to five years old, which we thought had been well protected against the winter, but find at least one half of them dead, and we are hearing the same complaint from others.

AGRICULTURAL WAREHOUSE.—We would briefly call the attention of farmers to the advertisement of S. R. Fox, who is dealing extensively in Agricultural Implements and machinery, embracing almost everything in that important branch of business. He will be found a first rate man to deal with, always uniform and low in prices.

THE WISCONSIN JOURNAL OF EDUCATION.—The first number of this Journal is on our table. It is edited by an association of the prominent educationists and teachers of the State, and can hardly fail to be characterized by ability and adaptation to the educational wants of the State. If it is intended for general family reading, we would suggest that some little embelishments and additional sprightliness of character will be found requisite; for nothing is more true, than that the masses insist on being amused somewhat, even in connection with instruction—especially the younger portion. We doubt not that the Journal will prove a valuable acquisition to any family, and worth much more than it will cost. We would advise all who can to subscribe for it. Terms, $1 per year, in advance. Address—Journal of Education, Racine, Wis.

THE REAPER FEVER seems to be prevailing extensively the present winter. Agents for their sale are plenty and urgent. Probably the different manufacturers of the Northern and Western States will make and sell at least 10,000 the present year; equivalent in the harvest fields to at least 75,000 men. With such an addition to the working force of the nation, annually, our progress in productiveness and wealth cannot be slow. The perfection to which Self Raking Reapers are being brought is a great desideratum in the aforesaid economy—making another and great additional saving of man's labor in the harvest. We were recently examining one of Seymour & Morgan's last improved Self-Rakers, and were so well pleased with its simplicity, certainty of operation, and apparent durability, that we bargained for one of them for our own use, although we already had a machine that had done us good service except that it needed a Raker —a work, by-the-by, that it is difficult for a green hand to perform. We believe the time is not far distant when Reapers without Rakes will be as uncommon as threshing machines without separators. We can see nothing in the Rake of this Seymour & Morgan machine that is not just as simple and durable as any other part of it, and just as easily managed by any man of ordinary ingenuity. If, however, we find on trial that it is not as simple and good as we are led to believe, we shall duly apprise our readers.

TENNESSEE FARMER AND MECHANIC, is the name of a new publication, the three first numbers of which we have received. It is well printed, on beautiful paper, and the contents of the numbers before us is unsurpassed by any exchange we receive from the East or West. We hope that the publishers do not rely in vain on "the disposition of Tennessee farmers and mechanics to sustain a home journal, devoted exclusively to the interests of their occupations," for if such journals as this are sustained and encouraged, the obstacles to agricultural improvement, and progress in general, will rapidly diminish. The "Farmer and Mechanic" is published at Nashville, Tenn., by Boswell & Williams. Terms, $2 per year.

MILWAUKEE NURSERY.—See advertisement of STICKNEY & LOVELAND in this number, all you that want anything in their line.

FIVE THOUSAND DOLLARS is offered by J. HERVA JONES to any person who will produce a planting machine superior to the one of which he is the inventor, as will be seen by reference to his advertisement. Randall & Jones' planter has quite a reputation, but we have never seen one in operation.

RANDALL [& JONES'

PATENT DOUBLE HAND

PLANTING MACHINES.

J. HERVA JONES, Inventor and Proprietor of the Patent for New York, Michigan, Wisconsin, Minnesota, and Northern Illinois.

OVER THIRTY First Premiums awarded—and over *Fifty Thousand Acres of Land Planted* with them in 1855! Twenty Acres of Corn have been planted by one man with one of them, in one day! I challenge any man, with any implement whatever, to a trial test—either on *time, quality* or *expense* of planting. I will give any person *Five Thousand Dollars* who will produce its *superior*. I have cuts and descriptions of a

NEW MARKER,

my own invention, which will *save much labor in cultivating*, and which I will mail free to all who purchase my Planters.

Rights and Machines for sale. Send for a Circular.

J. HERVA JONES.

ROCKTON, Winnebago Co. Illinois. Apr. tf.

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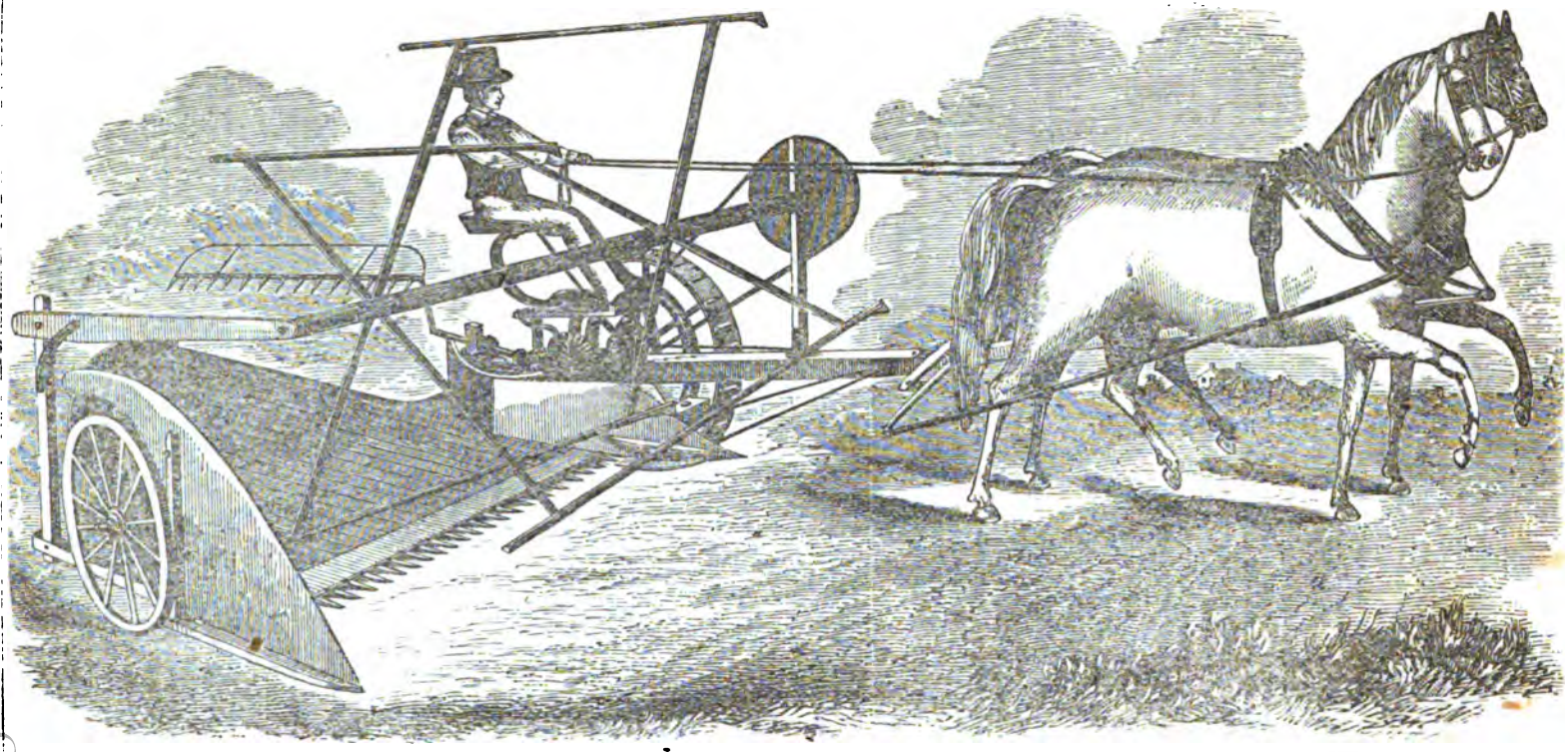
SEYMOUR & MORGAN'S

PATENT IMPRONED NEW YORK SELF RAKING



REAPER—WITH MOWER ATTACHMENT.

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SEYMOUR & MORGAN'S
PATENT IMPROVED NEW YORK
SELF-RAKING REAPER,
WITH MOWER ATTACHED!

ALL who have used a Reaper know something of the labor and skill requisite to rake off the grain in *good* bundles, and a *Self Raking Reaper* which should be simple in its construction, and durable, performing the work as well as the best hand-Raking machine, has been considered as a great desideratum, by all intelligent farmers. Such a machine is now offered to the farmers, and warranted to *cut* and *lay off* in *good* bundles from ten to twenty acres per day, with *one* man and a good team. The rake is *not* liable to get out of order, (like those of some other machines offered to the public), but is as durable as any part of *this* or any *other* Reaper. Among the important points of superiority in this machine may be mentioned—lightness of draught for teams, absence of side pressure, and width of cut 6½ ft. Made in New York of the best of eastern timber, it cannot fail to give satisfaction.

N. B.—Wet grain, grass or weeds form no impediment to the perfect working of the rake.

Price, delivered in Madison, $160,—$60, paid on delivering Reaper, and note given for $100, and interest due 1st Dec., 1856, which can be taken up for $95, if desired, after a fair trial in the harvest field.

Orders may be left at Fox's Hardware store, near the Court House. For circulars, descriptions, &c., apply to

apr-tf S. L. SHELDON, Madison, Wis.

Madison Agricultural
WAREHOUSE.
OF
SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constantly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,

Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,

apr-tf At sign of Pad Lock, Morris Street.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS & STATIONERY,
BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.

Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date, ... $1,374,284 00
Total amount of Premium Notes received, ... 21,500 00
do do Cash Premiums received, ... 11,454 00
do number of Policies issued, ... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and expenses paid to date, 9,871 40

Balance in favor of the Company Jan. 1, '56, . $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to Farmers and others wishing Insurance, a safe and reliable Company in which to insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:

B. F. HOPKINS, *Sec'y.* N. W. DEAN. *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS. *V. Pres.*

Directors:

L. J. FARWELL, N. W. DEAN, SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

Jan. tf. **C. C. OLIN, General Agent.**

MILWAUKEE NURSERY.

BEING OBLIGED to clear eight acres of ground, thickly planted in nursery, we are offering *great bargains* in Fruit and Ornamental Trees. Our stock consists in part of 30,000 Apple trees, from two to five years old—5,000 Pear trees, both Dwarfs and Standards—1,000 Plum trees—500 Cherries—a good assortment of Small Fruits, and a very large supply of Ornamental Trees, Shrubs and Plants.

We offer the last named in assortments *very low*, viz:

10 Ornamental Trees and Plants of 10 varieties, our choice, for $1,00
50 " " " 15 " $3,00
100 " " " 20 " $5,00

The above will be securely packed and forwarded as directed. Plants with which the above assortments will be filled are all *hardy, healthy*, and *well grown*—from 2 to 4 years old, and from 1 to 8 feet high. The retail price of most of them is 25 cts., and of some, 50 cts. each.

All orders accompanied with the cash, and received before April 20th, will be promptly attended to.

☞ Catalogues sent *gratis* to all who apply. Address STICKNEY & LOVELAND.

Arp. 2m. Box 463, MILWAUKEE.

NOTICE TO FARMERS.

The undersigned are now receiving and have on hand, a quantity of choice **CLOVER** and **TIMOTHY SEED**, which will be sold in quantities to suit purchasers.

Also, **Garden Seeds**, from several of the most celebrated gardens at the East.

☞ We have a few pounds of FRENCH WHITE CLOVER SEED, for lawns. BOWEN & CHURCH.
Wholesale and Retail Grocers,
Near U. S. Hotel.

Cash paid for all kinds of Farmers Produce.

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MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Quince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Syringas, Calycanthuses, Enonymuses, Honeysuckles, Bignonias, Prairie and other Roses —Dahlias, Gladioluses, Tulips, &c., &c.

Vegetable Plants:

Tomato, Cucumber, Melon, Cabbage, Cauliflower and Egg-plants—the most excellent varieties.

FOREST, FARM, AND GARDEN SEEDS.—I shall also keep *Locust, Osage Orange*, and the most important kinds of Nursery and Vegetable Seeds, for sale at the office of the *Wisconsin Farmer*, and I have made such arrangements with large dealers in Milwaukee, Chicago, Louisville and some of the eastern cities, that I can fill orders for *all kinds of Seed*, of the best quality, at short notice, and at the lowest rates. Many kinds of seed can be sent by mail without much extra expense. Any one sending 12 postage stamps will have a 2 ounce package of Locust Seed forwarded to him.

ORDERS left at the *Farmer* Office, or sent by mail, will receive prompt attention. H. F. BOND.

MADISON, WIS., Feb., 1856. t.f.

UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1.—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.

COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT,	do do.	3,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

L A CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEEDS "
" " HORSE POWER THRESHER,
" " CORN PLANTER:
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz. Silver Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea
" Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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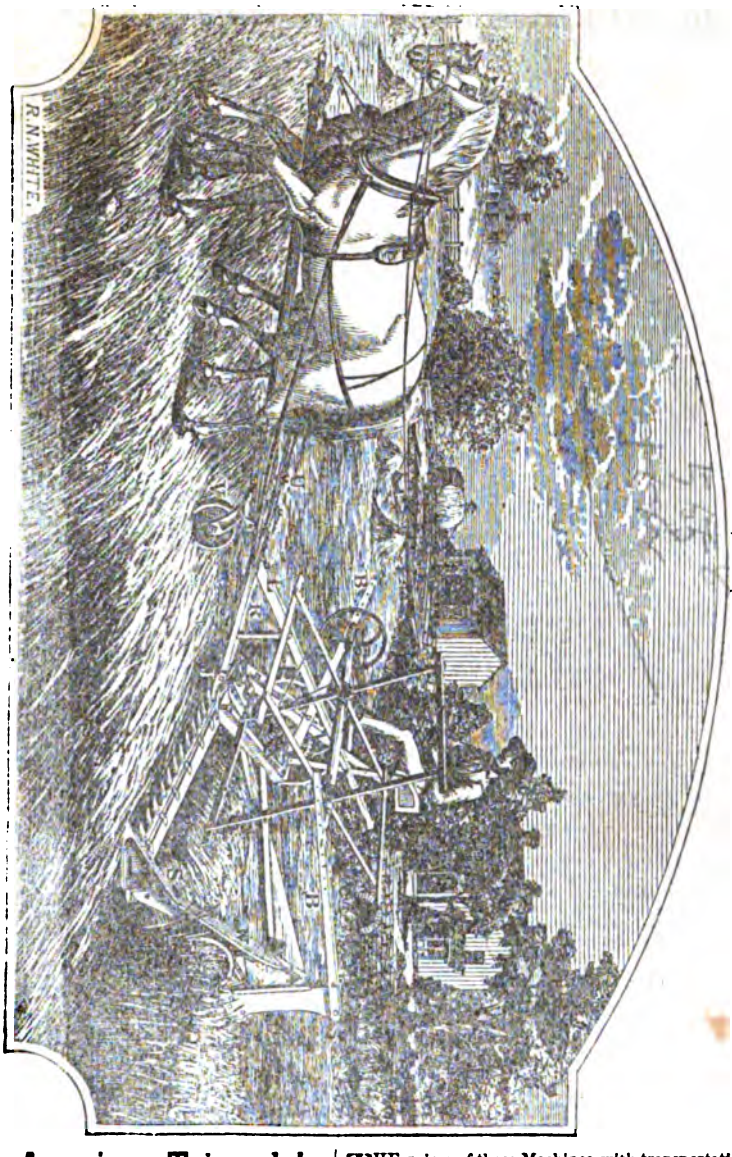

MANNY'S REAPER AND MOWER COMBINED—AS MOWING.

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent

ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation added, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - - $135
For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - $145
For Single Mowing Machine, of about 5 feet cut - $120

Descriptive Phamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & Co., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices,

AT THE WISCONSIN FARMER OFFICE.

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Fairbank's Patent Scales.

These Scales have been long known, and have stood the severest test, and are always right. Judicial decisions have been made in several of the States, within the last few years, where a discrepancy in weights was the matter in controversy, and in every case has been decided in favor of the party using Fairbank's Scales, and upon the grounds that they are the standard Scale.

The genuine Fairbank's Scales are manufactured by E. & T. FAIRBANK'S & Co., under the supervision of the original Patentee, at St. Johnsbury, Vermont, and at no other place. Rail Track—Railroad—Depot—Warehouse—Miller—Hay—Coal—Farmer's—Cattle—Platform and Counter Scales, of every size and modification, for sale at manufacturer's prices, and warranted, both for accuracy and durability, by C. L. HARMON & Co., 197, South Water St., Chicago; LANSING BONNELL, 89 & 91, East Water St., Milwaukee; and by B. H. CHADBOURN, General Agent, 197, South Water St., Chicago. TIBBITS & GORDON, Agents, Madison. t. f. Jan'y. 1. 1856.

New Principle! No Poison!

RHODES' FEVER AND AGUE CURE.

OR ANTIDOTE TO MALARIA,

FOR THE PREVENTION AND CURE OF

Fever and Ague, or Chill Fever; Dumb Ague, and other Intermittent and Remittent Fevers; also of Bilious Fevers, accompanied by Typhoid Symptoms; Typhoid Fever, Yellow Fever, Ship and Jail Fever, General Debility, Night Sweats, and all other forms of disease

WHICH HAVE A COMMON ORIGIN IN

MALARIA OR MIASMA.

This subtle atmospheric poison, which at certain seasons is unavoidably inhaled at every breath, is the same in character wherever it exists,—north, south, east, or west,—and will every where yield to this newly discovered ANTIDOTE, which neutralizes the poison, completely purifies the system, and thus entirely removes all the cause of disease.

The proprietor distinctly claims these extraordinary results from its use:

It will protect any resident or traveller, even in the most sickly or swampy localities from any ague or bilious disease whatever, or any injury from constantly inhaling Malaria or Miasma.

It will instantly check the ague in persons who have suffered for any length of time, from ONE DAY to TWENTY YEARS, so that they need never have ANOTHER CHILL, by continuing its use according to directions.

It will immediately relieve all the distressing results of bilious or ague diseases, such as general debility, night sweats, etc. The patient at once begins to recover appetite and strength, and continues until a permanent and radical cure is effected. And as a *proof* that it is also

WORTHY OF PUBLIC CONFIDENCE,

Because of its

SINGULAR AND ENTIRE HARMLESSNESS,

The following certificate from one of the most celebrated chemists in the United States is attached to every bottle:

NEW YORK, June 11, 1855.

"I have made a chemical examination of Rhodes' Fever and Ague Cure, or Antidote to Malaria, and have tested it for Arsenic, Mercury, Quinine and Strychnine, but have not found a particle of either in it, nor have I found any substance in its composition that would prove injurious to the constitution.

JAMES R. CHILTON, M. D., Chemist."

This allows of its

FREE USE AS A PREVENTIVE

by which all persons may thus be sure of entire freedom from the above named diseases no matter how sickly the season or swampy the locality.

PROOFS OF EFFICACY are frequently published, and the confidence of the public is asked only in proportion to its *actual merits* wherever introduced and used. These only are relied upon to prove its worth.

One or two bottles will answer for ordinary cases; some may require more. Directions printed in German, French and Spanish, accompany each bottle. Price One Dollar.

Prepared and sold by the proprietor,

JAMES A. RHODES, Providence, R. I.

STAINE & COOPER, Agent, Madison, Wis.

sale by druggists generally. And for [Jan.

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MADISON PLOW FACTORY.

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel plows which we will sell cheaper than any other plow of the kind ever offered in this market.

We would also call your attention to our Breaking Plows, and we feel confident their equal cannot be found east or west, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

STODDARD'S

Patent Hand Corn Planter.

THE SUBSCRIBER having purchased the right of said patent for the counties of Dane, Walworth and Columbia, of this State is now prepared to supply them to all who may want.

This planter is acknowledged by all who have seen it as superior to all other hand corn planters now in use.—It not only plants the corn of a uniform depth but distributes the kernels equally in each hill, allowing it to be cultivated each way. An active man can easily plant from six to ten acres per day. Price $5.

For sale by Tibbitts, & Gordon, S. R. Fox, and others, Madison, Wis. T. N. BOVEE.

ROCK COUNTY NURSERY.

THE proprietors have now for sale a large stok of trees, at prices which cannot fail to suit purchasers, and having devoted their entire attention to their propagation and growth, having been to much expense in obtaining scions from bearing trees they feel warranted in reccommending them to the public.

APPLE TREES 5 to 8 feet high 16 cts each or $140 per thousand.

PEAR, PLUM, and CHERRY, all of which are furnished Dwarf or Standard from 30 to 50 cts. each.

Those of extra size with fruit buds additional prices.

We would call particular attention to our stock of Evergreens, Ornamental Shrubbery, Bulbs, Roses, Plants &c., which we think is not excelled at the west. Nursery stocks, and scions furnished on liberal terms. Trees carefully packed for any part of the United States.

Catalogues sent gratis on application.

Jan. tf. COLBY & WILLEY.

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MAY, 1856.

Wisconsin Farmer,

AND

NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

The FARMER appears this month without its illustrated title page, for the reason that it was sent to New York, in the latter part of March, to be electrotyped, and, much to our regret, the electro-plates have not yet returned. We thought it better to dispense with it than to keep our subscribers waiting.

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POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

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TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with the Volume. Those wishing to subscribe, will confer a great favor by forwarding their subscriptions as early as possible. All monies for subscriptions should be forwarded with the order, and may be sent in reliable Bank bills, Postage Stamps, or Gold, by mail; and when the Postmaster is cognizant of its being sent, it may be considered at our risk.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**
MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

Seeds From The Patent Office.

STATE AGRICULTURAL ROOMS,
MADISON, MAY, 1856.

SINCE going to press we have received a parcel of Seeds, all of the small packages of which we forward to members by mail. Large packages of Russian and Spanish Flax Seed. Italian Ray Grass, and French Peas, we will forward to those who will send us the stamps to pre-pay them with. They will usually weigh down from four to six stamps. D. J. POWERS,
May, 1856. *Act. Secretary.*

Madison Steam Planing Mill,
AND
SASH, DOOR AND BLIND
MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6×6. 6. to 2.10×7ft., 1¼ & 1½⅜in. thich, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing arficles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We run two turning lathes, and do all kinds of turning. We keep a large assortment of Nervil's Banisters and Cabinet turning always on hand, and do Planing, Sawing, and in fact, make almost any thing of Wood.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.
March, 2m.

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1865, Sept. 15.

WISCONSIN FARMER, AND NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., MAY, 1856. NO. 5.

SUGGESTIONS FOR MAY.

"Fled now the sullen murmurs of the north,
The splendid raiment of the SPRING peeps forth:
Her universal green, and the clear sky,
Delight still more and more the gazing eye."

Bloomfield.

Spring is now fairly upon us, and fast merging into Summer. May, that loveliest of all seasons, with its soft smiles makes everything glad and every heart rejoice. The Siberian fierceness of winter, with its howling blasts, and adamantine frosts, with its devastation and death in the farm yard and the orchard, is fast fading in its intensity of recollection; and in the soft embrace of summer, will soon be numbered with the past, and its sorrows forgotten. How typical of the regeneration of a fallen world is the rejuvenation of nature, in the opening of Spring. How ethereal are all its aspirations, how heaven-like and inexpressibly delicious to ramble amid its green fields, and quiet sunny places, of a bright balmy morning. Who that has a soul has not been lifted up on such occasions, to a partial foretaste of that better ideal country, that is the hope of all hearts? Who has not had his faith in immortality strengthened by this great annually recurring demonstration of nature? The soul that is not touched and lifted up by the opening youthful charms of a northern Spring, is but an ossified heart, merely, on a level with the "brute that perisheth."

But we must step down from the sublime musings of a Spring morning, to the common affairs of every-day life; for it is a well established fact that all the glimpses of ethereal life will not prevent our poor bodies from getting hungry, naked and cold. Then let us turn our thoughts to these present necessities.

The orchard, we suppose, is already set; but if it is not, we would only refer the reader to the very full instructions on that subject in our issue of last month, and urge all to carefully and fully observe them—even to the mulching. Everything else done ever so well, and this part omitted, and it will be good luck if one third, or one half of the trees, are not lost beyond hope the first season. Such at least has been our experience; therefore we advise all to be thorough, and finish up their tree planting completely before leaving it.

The field sowing is undoubtedly all finished up before this; and the fields all rolled smooth and ready for the reaper. If so, "'tis well." How many farmers would dispense with the roller, if they were satisfied its use would pay them five hundred per cent. on the labor it cost to use it? We have little doubt of the fact, especially on all light soils. Any man who can make a sled can make a roller, at an expense of from $5 to $10, but those who feel able will do better to invest more money and buy a good one, of the most approved model.

The sowed crops out of the way, next comes the CORNFIELD—a better field, by the way, for modern youthful chivalry than Buena Vista, or Sevastopol—altogether less dangerous, considerably more remunerative, and quite as honorable, if not more so.

First then, is your seed on hand, and of the right kind?—of that kind which will yield you from 50 to 75 bushels to the acre, with good cultivation? If not, look up such as is right, remembering that a frequent change of seed is just as useful with corn as with wheat.

Before planting seed, always test it—which is but the labor of a few moments, and often will save a great deal of replanting, and what is still more important, loss of time for the growing crop. To test it, nothing more is necessary than to put a small parcel of it into a dish, and pour on warm water; set it in a warm place, and if the seed is good it will germinate in two or three days, at farthest. If it does not, you may rest assured that its vitality is gone; and you may as well plant

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gravel stones. No careful man should plant seed corn before testing it, any more than he should trust a stranger at sight. The germinating principle in corn is very delicate, and easily destroyed. It sometimes fails even, when gathered carefully and triced and hung up in a dry place—though not often. Still, all seed should be tested before planting.

Our theory about the ground is, not to plow it until you are all ready to plant it. Plow well and deep, in long uniform lands, calculating every land accurately, so that no row will come in the dead furrows; when thus plowed, apply the roller at once in a lengthwise direction, until the surface is uniform and smooth. It is better than dragging, as it does not uncover the weeds. Then, with a good marker row both ways, as straight as a line, four feet each way. Put the seed in two inches deep, at the angles, leaving the ground as smooth as possible after all is done. If the soil is particularly warm and dry, soak the seed twenty-four hours before planting, especially if the season is a little late; but if in good season, and the soil ordinarily moist, plant without soaking.

From the first to the tenth of May is the proper time to plant corn, and if the course is pursued that we have marked out, it will usually be an easy matter to keep the corn ahead of the weeds, especially if the weeding is promptly attended to, just when the corn is of the right size. A few days too late, will make all the difference imaginable; you may as well neglect a house on fire, as a thrifty crop of weeds.

Next in order of field planting, come Potatoes—which, by the way, have become rather a doubtful article, to say the least. The rot seems yet to baffle all enquiry as to its exact origen or nature. Theories are as abundant on the subject as on the matter of wheat's turning to chess, and thus far, one is just about as satisfactory as another.

A few things, however, in relation to the rot, seem pretty certain—among which is the fact that seme kinds are more inclined to rot than others. For instance, the Pinkeye and Mashanock families seem almost sure to rot, upon moist rich soils. We raised a fine crop of White Mercers last year, but they were all struck with the dry rot after being dug, and proved a total loss. The same with our Mashanocks and Pinkeyes, whilst some of the hardier old fashioned kinds withstood it very well.

We would recommend planting on warm, dry soil, and in tolerably good season—of such seed as each man has found safest. Till well and dig early, before the heavy, cold fall rains. Don't be fooled into buying *Discorea Batatas* or *Chinese Yams*, until the speculators who have them in hand have proved their worth, which we think will not be fast, nor high.

Carrots are a valuable and profitable crop to raise, for feeding stock, sheep and horses, as a change with grain. They can be produced in large quantities, with no extraordinary amount of expense if properly managed; but it is folly to undertake to grow them on poor soil, or with negligent culture.

For carrots the soil should be plowed deep and thoroughly—not less than sixteen inches. This may be done, in the absence of a subsoil plow, with a common one, by going twice in a place. The soil should be of the first quality—no matter how good; and good well rotted manure will even help that. As we said in relation to corn, we would not plow for carrots until all ready to sow; and the last of May or the first of June is soon enough. Prepare the land the same as for corn, except the extra depth of plowing; sow from eighteen inches to two feet apart in drills; the latter distance will be preferable if you are not crowded for room, as it admits of cultivation with a horse and shovel plow, or cultivator. Don't defer weeding a day after the right time, as everything depends on doing these things in season. At the first or second weeding thin out the plants to from six to nine inches apart; this precaution will contribute as much as any other one thing to the growth of a good crop.

All the foregoing directions pursued with care, and such other things as will suggest themselves to every good cultivator, and we will warrant a good crop—say of from three to eight hundred bushels per acre. We prefer the orange colored to the white. We would recommend to every farmer and gardener, to raise enough carrots for a change of feed for his animals at least, and more if he pleases. Still we do not believe that a

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bushel of carrots contains more than half the substantial nutriment of a bushel of oats, or more than from one fourth to one third of a bushel of corn; yet after all they make an excellent change, which is just as acceptable to animals as to men.

Passing over divers other field crops, for want of space, we would come to the garden; and say as formerly, that it is of the first importance to every one who has ground enough on which to make it. It pays an abundant and profitable crop for all labor bestowed upon it, and what is more important still, it furnishes what every family needs, and what cannot usually be bought, except in and about large towns. Who has not remarked the difference between a dinner gotten up by a good efficient housewife, with the aid of an abundant garden, and the product of a poor house-keeper, and no garden? It is as great at least as the difference between day and night. A garden is more especially important to common farmers, because they are usually so short of any considerable variety of meats. An ample supply of vegetables not only contributes to our comfort, but it is equally certain that they are great promoters of health, when used with discretion.

There are hosts of semi-invalid ladies who would find moderate garden labor their best medicine, if pursued with regularity and perseverence. No matter if delicate hands are ungloved, and even occasionally mingled in that mother earth, whither the whole body of many a pale invalid house-plant is so rapidly tending. Close, warm rooms, easy chairs, high living, not much work, paper-soled shoes, and gently sprung carriages to ride to the nearest neighbor's in, instead of walking, are very nice in their way, but are more rapid passports to the grave than is generally supposed. That medium poverty which begets industry and simplicity of habits, is often a blessing in disguise that will bring with it health, happiness and length of days.

Then fit up the garden, as surely as the farm; no matter if you are not an adept in the business. It requires no particular skill to plant early potatoes, peas, corn, cucumbers, &c.; the main thing is to get about it. It will not do to put off the garden work until a rainy day, or until the hurry of things is over; but on the other hand secure your seeds in season, and make the garden in its time, as punctually as you should sow your wheat. Such is our advice, and we believe every one will find it profitable to follow it. If the chickens make you trouble by scratching, feed them well until the plants are out of the way. Most seeds are much hastened in germination by being soaked, from one to two days in warm water, and then rolled in air-slaked lime, or dry leached ashes, before planting. They will be hastened one half in that way, and are less likely to be disturbed by worms. If worms or bugs cut off your cucumbers or melons, keep planting more. and trust to a favorable season to give you plenty.

If you have a strawberry bed, (and if you have not it is a pity,) it will pay to top dress it with well rotted manure, after thinning it out sufficiently; and the plants, to do well, should not be nearer than a foot apart in the row, and the rows two feet apart. Be careful and put up good substantial supports for green peas and tomatoes. They will bear as much again and better fruit, for being well supported. Spend as much time as possible in the garden, if you would have it thrive.

For the Farmer.

THE MARSHES OF WISCONSIN.

But little has been written in our western agricultural papers on the improvement of our natural meadows, commonly called marshes. Have they not been a source of wealth to our farmers? Is there not a large amount of wealth-creating material in them now? Do they not rise in value and estimation as we become better acquainted with them? Do not the majority of our farmers depend on them more or less for pasturage and hay? They suffer but little in times of drouth. Is it not injurious to pasture them in spring? Is it not best to know the growth of a season at once? Is it not injurious to cut the grass when it is rapidly growing? Can their yield be increased? Does ditching help them? Farmers have tried the ditch to drain the marsh, and answer for a fence. A ditch is a poor substitute for a fence; where the land descends, the current keeps the ditch open at the bottom of the descent, it soon drifts full. No man will put in covered drains 30 feet apart and 2 1-2 feet deep, at an expense of $40 per acre, to make land worth $20

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per acre. Is not a piece of good marsh as valuable as any part of the farm? It may be cut before harvest, and suffers far less than cultivated grasses if it stands till after harvest. If well stacked, it will shed rain like a shingle roof. A good quality of it brings about two-thirds as much as Timothy. Cannot some ingenious Yankee invent a machine to cut off the hammocks easier than plowing, so as to make a smooth surface?

Stock don't thrive well if confined to a marsh all the time. Some upland ought to be enclosed with marsh to make good pasture. Several years ago the Messrs. Wright built a saw mill on a small stream emptying into the Fox River. They built a low dam and turned the water into a race. The dam raised the water level with the banks of the creek. The race was filled in the winter. In the spring the man who owned the land adjoining went to the mill with a doleful countenance, and said, "Your dam must come down it is spoiling my marsh."

The mill was doing a good business, and the owners were satisfied that it would pay for itself in a single year—hence they answered that they would buy the land; but the owner declined selling. Then they offered to pay all damages, and to convince the owner, paid him ten dollars. The dam was not taken down, and the heaviest crop of grass that was ever cut there, was that season. After that they were even requested to leave the dam.

I have a marsh that is ditched to let off the surface water, and a part of it has been pastured for several years with sheep. The grass annually grows shorter and finer, and the sod more level and firm. Would not the plowing of meadow lands, when it is practicable, be of great utility in increasing their productiveness? My experience leads me to think so. Respectfully Yours,

JOS. A. CARPENTER.

WAUKESHA, April, 1856.

AFFLICTION saves from the excesses of affluence, and shows us that human sympathy is the same through poverty and wealth when the pride of enjoyment has been humbled by it.

GRATITUDE is the fairest blossom which springs from the soul; and the heart of man knoweth none more fragrant.

For the Farmer.

BUILDING MATERIALS FOR THE PRAIRIES.

MESSRS. EDITORS—In previous articles I have thrown out some crude suggestions in regard to supplying the *Prairie regions* with *water and wood;* and now propose some directions for procuring cheap and durable *building materials.*

Almost every mile square of the prairies possesses beds and knolls of gravel and pebbles, or quarries of rock, which is finely broken up on the top and outer edges; so that it requires but little trouble to excavate or shovel it out; and, at small expense, all of this may be converted into advantageous and pleasant building material. Besides, in most locations, this excavation may be made at the very site where the house is to be placed; so that the substance for the walls may be obtained from the cellar, and thus the walls be constructed at a much cheaper rate, than any other description of walls can be made; being also better than wooden houses, and equal to brick or stone.

This kind of wall is known by the various names of *grout*, *gravel*, and *concrete;* and needs only to be *properly prepared* to become firm and durable. I have seen many buildings—some of them very large ones, which have stood for years as firmly as the best mason-work; while others have cracked and tumbled down in a short time; and these different results were owing entirely to the different manner in which the material was prepared and laid up.

There are four essential principles to be kept strictly in view, which if carefully regarded will ensure substantial, and not very costly buildings: *first*, prepare the foundation by setting it below the frost mark, laying it in mason-work for two feet above the surface of the earth, or make the grout for that part of the wall with *water-lime*, as proof against moisture in the earth. *Second*, good lime should be slaked in the mortar-bed, and well stirred with water enough to make a thin paste, about the consistency of mason's "putty coat," and left to cool for a day or night, till all the steam and air have passed out or evaporated; for this purpose it is best to have *two beds*, that one batch may be made and cool while the other is being used—so that none of the concrete need be put into the walls in a hurry, before it is

properly seasoned; and quite enough to fill a full course clear around the building should be made at once, so there will be an even temperature throughout the work, in all the layers of concrete.

When the lime paste is made, then comes the *third*, and very important operation—that is to stir in the sand, gravel and broken stone, and thoroughly mix it, with hoe and shovel, so that the entire surface of all stones will be completely covered with the lime; in fact. here lies the most essential part of the whole work—to have lime and stone fairly mixed and cooled till the whole will be of uniform temperature. Any hard substance to which lime will stick, is good to stir in, such as sand, gravel, broken stone and brick, or pebble stones, from the size of gravel up to six or eight inches through—anything not larger than the walls are thick.

The *fourth*, though not equally essential care to be taken is, that all the timber or sticks used in the walls should be green or wet wood, that it may not absorb an undue degree of moisture from the concrete, and afterwards leave cracks by shrinking away when all becomes dry—neglect of this may cause cracks in the walls.

The proportion of lime to be used, should vary somewhat according to the coarseness of the other materials; if the stone and other filling be coarse, less lime will be needed, as there will be less surface to be covered; but as a general rule, where I have seen good durable work, the proportions have been 9 to 12 of gravel and stone to one of good lime. For cellar walls, hydraulic lime should be used; and even for the first story throughout, it is better, if to be had.

When this concrete or mortar, well mixed, has lain 12 to 15 hours in the bed, it is to be shoveled into the walls, as it would be shoveled into a cart or wheel-barrow.

The common mode of laying up the concrete is in rough board boxes placed where the walls are wanted. This is done by setting up studding or scantling at the corners of the building, inside and outside of the walls, taking care to have them plumb, fastening the bottom, and stay-lathing the top, to keep them in place—intermediate ones being stationed at every 8 or 10 feet between corners, to keep the boards from springing and making the walls thicker in the middle; the boards are set up edgewise between these upright studs, when the concrete is shoveled in till the box thus formed is full, and left to dry or "set," which takes 15 to 20 hours in dry weather: in very warm weather, a course of a foot depth (with boards a foot wide) clear round the building, may be laid up each day; only two sets of boards being necessary—one set remaining on the last course, while the succeeding one is filled up. This same lumber is good for roofing, inside partitions, &c., after having served for wall-boxes.

In a two story building it is safe to make these walls, the first story one foot thick, and the second story eight inches thick; though many persons have made substantial walls, some inches thinner. It is necessary of course, in this manner of building as well as others, to tie or stay the cross and floor timbers firmly to the walls.

In this vicinity, with the present prices of lime, labor and other things, it is safe to say that good durable walls can be put up at a cost of 10 to 12 cents per cubic foot.

In addition to the above which I have learned from observation and experience, the following remarks on concrete and mortars, is from a work written by Lieut. Wright, who was for a long time employed by the Government on public works, making sea-wall, fortifications, &c., making and proving many experiments, and had perhaps as much knowledge, and is as good authority on that subject as can be found—so that it can be relied upon.

He says that "clean sand, gravel, broken stones, cinders and oyster shells, may be mixed with lime paste, tempered with sand somewhat thicker than common mortar, say about twelve parts of sand to five of lime, before putting in the coarser materials.

"A cask of stone lime weighing 240 pounds net will make eight cubic feet of stiff paste, which will admit the mixture of sixteen bushels of loose sand; the paste should become cold before the gravel or broken stone is added to it.

"As a small quantity of the carbonic acid of the atmosphere is confined in the interstices or spaces of the concrete, the bad effects of it may be avoided by drawing tubes or rods every few feet upward through the wall, as the work progresses, which gives vent to

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this acid, at the same time these small flues or openings up and down the walls, serve the further purpose of good *ventilators* to the rooms by bvinn opened at the *bottom*, *outside*, and at the *top*, *inside*, while they also conduct off the little moisture which may be collected from outside exposure and dampness, and tend partially to serengthen the walls, as the concrete hardens more and quicker around these perforations."

He cautions that the foundations must be good mason-work, or hydraulic lime for some feet above the surface, that moisture might not be imbibed to soften the concrete; and also that the whole should be thoroughly stirred and mixed, so that the surface of every pebble and stone be well coated with the cement, and they will then stick firmly, and the whole mass become hard and consolidated, to endure time and weather.

For wall against the sea or water, Mr, W. made a batch of concrete, prepared with eight cubic feet of lime paste, eleven cubic feet of stiff water-lime paste, and thirty-two cubic feet of clear dense sand, the product of which was about forty cubic feet of close, stiff mortar. This mortar was then made into concrete, by first putting one-third of it into a bed, and adding twenty-two cubic feet of broken stone and twelve cubic feet of gravel, making thirty-four cubic feet of stony matter, which was well stirred and mixed; then the balance—two thirds—of the mortar was spread into the bed, and the whole thoroughly mixed and incorporated, so that the entire surface of all the stony matter was coated and the gravel completely mixed with the paste—and produced, when thus finished ready for the walls, about thirty-nine cubic feet of close and most durable concrete; and in the vicinity of Boston, at a cost of only two dollars and sixty-three cents per *cubic yard*—less than ten cents per cubic foot.

And walls of this description are warranted to stand for ages against floods and weather. But for walls above ground, and in dry places, as dwellings, barns, &c., the water-lime may safely be dispensed with, and the expense considerable lessened thereby.

From various thorough and critical experiments, Lieut. WRIGHT gives the following statement of the comparative costs of masonry and concrete works, in different operations which he has directed, at Fort Warren: Rubbled masonry, dry, costs per cubic yard, $3,00; Facing stone—sea-wall—hammered joints, &c., $9,00; Concrete—costly kind—per cubic yard, $3,50; Concrete—least costly kind, $2,12 per cubic yard. And it is believed that good concrete walls can be built in most parts of Wisconsin, at a cost not exceeding two dollars and fifty cents per cubic yard; as the work can nearly all be done by common laborers, with a man of good judgment and fair skill to superintend the operation, and see that the concrete is well mixed, and the walls kept plumb.

Yours, D. S. C.

For the Farmer.

A LITTLE TO THE FARMERS.

MESSRS. EDITORS—If you wish to raise potatoes, and preserve them from the rot, plant them early on dry ground, that they may get ripe before the fall rains, and frosty and freezing nights, and warm, sunny days. After a cold, frosty night, the sun comes up warm, melts the frost, thaws the ground, creates a steam in the ground, and causes a fog to rise which is unhealthy to the potatoes; and after a fall rain, the sun comes up, and soon the fog and steam rises again, sours the potato tops, which causes the rust to strike them; then they will soon wilt and wither down; then the tops will keep the ground moist, they will soon commence roting, sour the ground, which soon creates the rot in the potatoes. If your potato tops strike with the rust before the potatoes are ripe, mow them off and take them away, or burn them up, that they may not lay on the ground top of the potatoes; and when you dig the potatoes, if they are affected by the rot, sort out the sound ones, and lay them on the dry ground or a floor, and let them thoroughly dry in the sun. Make your bin of seasoned boards; put in a thin laying of dry, prairie hay, a laying of potatoes, then a laying of hay, then of potatoes, and so continue till your potatoes are in. I have proved this to my satisfaction. I will say further, if your cellar is damp, the hay will gather the moisture, and the potato remain dry. Raise your bin 4 or 6 inches from the ground to let the air go under, and instead of a tight floor, lay round poles or narrow boards 2 inches apart, to let air circulate through the potatoes; this

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keeps a circulation of air through the bin, prevents heating, and if one is affected when they are put in the bin, it will dry and rot no more; or if a potato is frozen when put in, the hay will gather the juice of the potato, without affecting the rest of them. By rot, and hard winters freezing potatoes, they have become very scarce, and demand high prices, and when you have but few, or can get but few, and wish to plant considerable ground, cut them into small pieces, leaving an eye on each piece. Be sure to have each piece run to the center of the potato. I think they will do full as well as to plant the whole potato. For an experiment, I picked out some large ones, took one half of them, cut them into very small pieces; I quartered the eyes; was careful to have each piece go to the center of the potato. I planted them where the ground was no better than the rest of the field. I planted one row of the pieces, and one row of the whole ones. I planted one row of each in this way, and both at one time—cultivated and harvested them at one time. When I planted, in the first row I put in one large potato, and in the second, three small pieces, to a hill. Each small piece would have one large main stalk, and there would be but one large main stalk to the whole potato. When I harvested them, some of my neighbor farmers came for their own curiosity and satisfaction to witness the crop. The small pieces proved the best for three years' experience.

If you wish to raise early potatoes in your gardens, put the seed end of your potato down next to the solid earth. Then, soon as the root starts, it enters the ground, draws nourishment, and sends the stalks quickly up. If you lay the seed end of the potatoes up, the stalk first starts, then stops growing till the roots start and grow round the potato, gets into the ground, and draws nourishment for the stalk; then it commences growing again. There is a week in which there is no progress made with the stalk.

C. S. WARD.

EDEN, Fayette Co., Iowa.

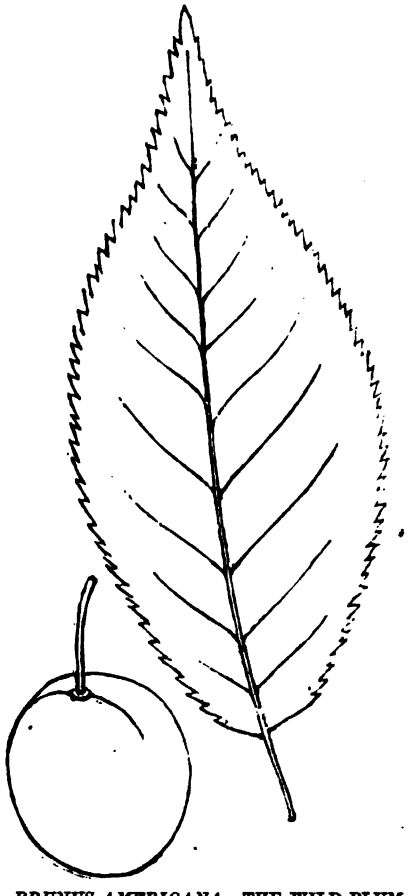
WHITE HAIR is the chalk with which Time keeps his score—two, three, or four score, as the case may be—on a man's head.

NEVER take pride in your wealth until you have lost confidence in your manly virtues.

THE FOREST TREES OF WISCONSIN,
Belonging to the ROSACEAE or Rose Family.

BY I. A. LAPHAM.

This large family of plants includes not only the true roses, but, under its several subdivisions, the Plum, Cherry, Spiræa; the Geums, Potentillas; the Strawberry, Blackberry, Raspberry; and the Thorns, Apples and Pears. Many of the most valuable fruits peculiar to this latitude and climate belong to the Rosaceæ. A large share of the species are herbaceous, or shrubs, and therefore do not fall under our notice at present. There are nine, mostly small trees, in Wisconsin belonging to the family under consideration -being one-sixth of the whole number; and the proportion of plants of this family to the whole number of Wisconsin flowering plants, is as one to twenty-five.



16. *PRUNUS AMERICANA*—THE WILD PLUM.

No. 16.—*Prunus Americana*, of Marshall

—the Wild Plum.—This small tree with its rich red or yellowish fruit, grows very plentifully in every part of the State where there are low, damp, rich grounds, especially along the margins of rivers and swamps. The flowers appear in May, before the leaves are fully expanded, and the fruit is ripe in August. The tree is much branched, and beset with strong thorn-like stubs, forming a strong protection to the fruit, and causing much trouble in gathering it. The wood is hard, of a dark reddish color, resembling the wild cherry. If it could be obtained in sufficient quantity, it might be substituted for that wood in cabinet making, &c.

The Wild Plum naturally runs into numerous varieties; Mr. Nuttall counted no less than a dozen different kinds in one orchard examined by him, in Canada. This natural tendency shows that differences of soil and culture have decided effects on this wild fruit, and may be a hint to fruit-growers to make experiments with a view to its improvement. Dr. Darlington informs us that it has been improved by long culture in eastern Pennsylvania, both in size and flavor, the fruit sometimes attaining the size of a common apricot; though it is not probable that any very special efforts Were made to produce this result. With the skill of modern fruit culturists, it might, without doubt, be greatly improved. It has the decided advantage over the garden varieties of not being attacked by the curculio—the pest that destroys the fruit of our finest kinds without mercy.

The Wild Plum appears to have been formerly much cultivated in our country; and from some indications it is probable that several of the Indian tribes may heve planted this tree near their villages. The thickets of wild plum trees are usually allowed to remain by the first occupants of our new lands: but the introduction of better kinds soon cause them to be abandoned.

This species was first described very fully and accurately by Humphry Marshall of Pennsylvania, in 1785, but has been confounded with others by some writers. The errors were detected as early as 1829, and pointed out by Dr. Darlington, in the Annals of the New York Lyceum of Natnral History; yet we find English botanists still copying the old blunders. Even in the last work of Loudon, it is placed under the name of *Cerasus nigra*—the black *cherry!* There can be no doubt the name given by Marshall, and adopted by all American authors, is the proper one—having been first applied.

Figure 16 represents the leaf and fruit of the full size of nature,

There are in the United States four different species of native or Wild Plum; one of them (*P. maritima*, Wang.) is confined to the Atlantic States; another, (*P. glandulosa*, Hooker,) has only been found in Texas; and the last, (*P. chicasa*, Michx.,) the Chickasaw plum, grows as near to us as the southern part of Illinois and the adjacent parts of Missouri.

No. 17.—*Cerasus Pennsylvanica*, of Loisel—the Bird Cherry.—The genus Cerasus, or the true Cherry, is represented in the United States by ten native species, of which six are trees and four shrubs; in Wisconsin, by four species, of which one (*C. pumila*, Michx.,) is a very small, low shrub, and consequently omitted here. The Bird Cherry is not very common with us. It has been detected in the vicinity of Milwaukee; Mr. John Townley has found it in the interior of the State, and Professor Agassiz carried it from the shores of Lake Superior.

The bark of this tree is, like that of most of the cherries, smooth and brown, detaching itself laterally: the wood is fine grained, of a reddish hue; the inferior size of the tree only forbids its use in the mechanical arts. Of all the American species this one bears the greatest analogy to the cultivated cherry tree imported from Europe.

In Professor Emmons' very valuable Report on the Trees and Shrubs of Massachusetts, we find it stated that this tree grows in the most exposed situations; in some parts of Maine and New Hampshire it springs up abundantly on soil which has been recently laid open to the sun in clearing, and especially after it has been burnt over. There is a common opinion among the ignorant that it springs up without seed, in consequence of some action of heat upon the soil. If they would take the pains to examine, they would, however, find great quantities of the seed (or stones as they are called,) just beneath the surface of the ground. This excellent advice of Prof. Emmons—to examine—if carried out, would save us from many false

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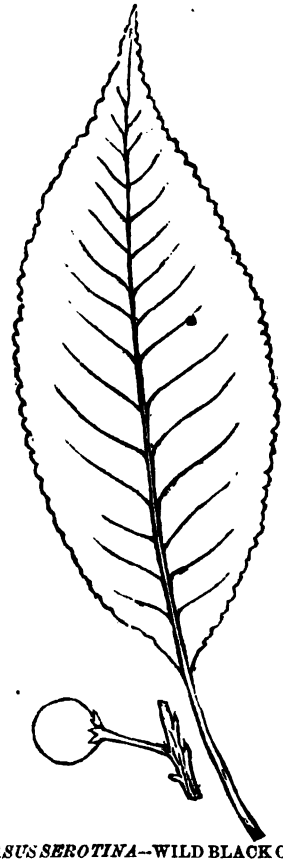
theories and incorrect conclusions in regard to similar cases—not excepting the vexed questions about the equivocal nature of chess.

The small red fruit, (about the size of a pea) ripens in July. The tree can be distinguished from the common wild cherry by the growth of the flowers and fruit, which is in clusters in the axils of the leaves, like the garden cherry. In both of the following species the flowers and fruit grow in racimes (like a bunch of grapes or currants,) at the ends of the branches. Michaux describes this species under the name of *Cerasus borealis*, or the Red Cherry.

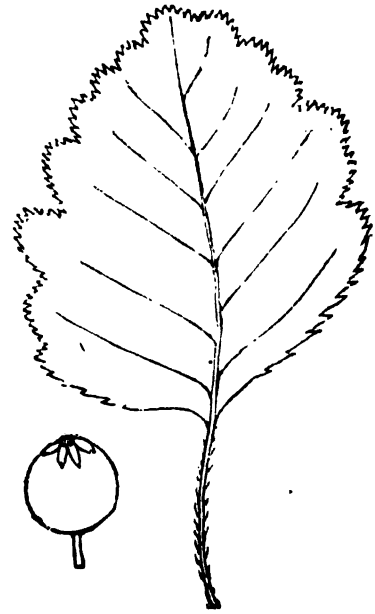


18 *CERASUS SEROTINA*—WILD BLACK CHERRY.

No. 18.—*Cerasus serotina*, of De Candole —Wild black Cherry.—This species, too well known to need description here, is found very commonly in the timbered parts of the State, where the trees are cut into logs and used for cabinet work. For this purpose the wood of the wild cherry is a great favorite. It is almost equal to the imported mahogany, and is preferred to the black-walnut, on account of its lighter and less sombre appearance. The tree is also quite ornamental in its growth and appearance, and besides has the merit of attracting to it a constant throng of singing birds. A few trees should be preserved in the vicinity of every homestead in Wisconsin, if for no other purpose, for that of attracting the feathered songsters near our premises. Besides feeding on the wild cherries, they will destroy for us immense numbers of insects, and thus prevent their depredations.

The flowers appear in May, and the fruit ripens early in the summer. Figure 18 shows the form and general character of the leaf and fruit, both of the natural size.

No. 19.—*Crasus Virginiana*, of De Candole—the Choke Cherry.—The Choke Cherry may be distinguished from the last species by its much smaller growth; its broader, obovate, sharply serrated leaves; the short and close racimes; the lighter color of the fruit, &c. It would make a handsome ornament in our pleasure grounds, on account of its bright shining foliage, and the numerous spikes of white flowers. It does not attain sufficient size to be of any use in the arts of fife. The flowers appear in May, and the fruit ripens in July and August.



20. *CRATÆGUS COCCINEA*—THE SCARLFT FRUITED THORN.

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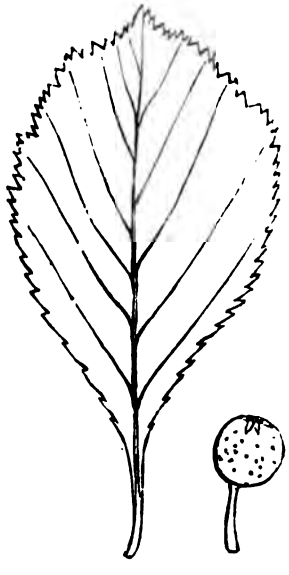
No. 20.—*Cratægus coccinea*, of Linnæus—the Scarlet Fruited Thorn.—This thorn, of which there are many varieties, may be known from the other species by the large bright red globular fruit; or, in its younger state, by the leaves, which are roundish, ovate, thin, lobed, sharply toothed, and abrupt or heart-shaped at the base. Some botanists have ranked the varieties as distinct species. It prefers rich bottom lands, but grows well in almost any kind of soil. It is the most abundant species of thorn in Wisconsin. The flowers appear early in May, and the fruit is ripe in September. It is a small tree, usually with a regular roundish head, making a very handsome appearance.

The Scarlet Fruited Thorn has been recommended very strongly for hedges; but for information on this head we must refer the reader to the article signed "G.," in this volume of the Wisconsin FARMER, page 116.

The fruit is edible; and but for the smallness of size and the hard stony seeds, would be a useful article of food. It resists the action of the severest frosts—remaining sound after the extremely hard winter just past. The flowers emit a very strong and rather disagreeable odor when fully out, and the tree is then a very beautiful object.

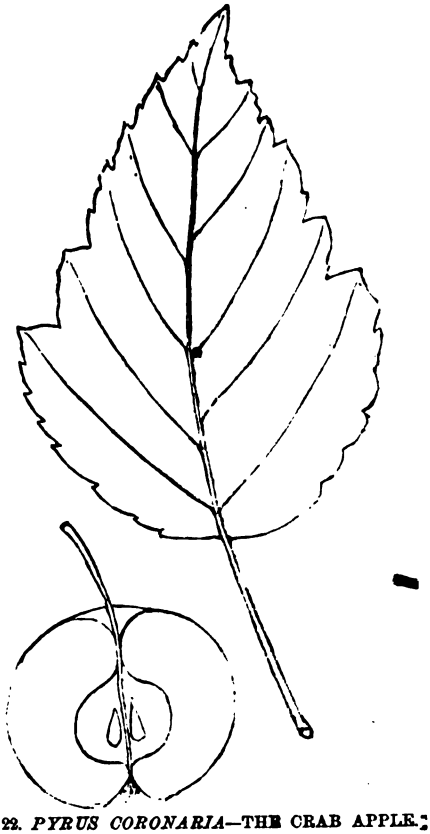
Figure 20 shows the character of the leaf and fruit of the natural size.



21. *CRATÆGUS PUNCTATA*—THE DOTTED FRUITED THORN.

No. 21.—*Cratægus punctata*, of Jacques—the Dotted Fruited Thorn.—This is usually smaller than the last, the fruit dull red, or yellowish, and dotted; the leaves will at once distinguish the species, being wedge-shaped, and tapering below into a slender petiole. Like most of the thorns, it prefers to grow along the borders of rivers, &c., flowering in May and ripening its fruit in September. For its value as a hedge plant, see the articles already referred to.

Figure 21 represents the form of the leaf and fruit, of the natural size.



22. *PYRUS CORONARIA*—THE CRAB APPLE.

No. 22.—*Pyrus coronaria*, of Linnæus—the Crab Apple.—This well known tree is quite common in Wisconsin, presenting its large, fragrant flowers in great profusion in May, and its rich fruit is ripe in September. Were it not so common, it would be highly prized as an ornamental tree, on account of its beauty of form, fine foliage, large, rose-like flowers, &c. A hedge made of it must be one of the finest kind; especially if trees

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at each angle, and at regular distances on the straight lines are allowed to grow and assume their beautiful rounded heads. It would be worth our while to form such a hedge on account of the fragrance of the flowers in the spring.

The fruit of the crab-apple has been used for preserves, but it soon gives way to the cultivated apple. It has also been used to make cider, for which purpose it is said to be well adapted. Fig. 22 shows the outline of the fruit, and a section of the apple, both of the size of nature.

No. 23.—*Pyrus Americana* of De Candole—Mountain Ash.—This small, but very ornamental tree, grows abundantly in the northern parts of the State, and is occasionally found as far south as the latitude of Milwaukee, which is its extreme southern limit n that direction in Wisconsin. It is chiefly prized about our gardens and yards for its fine foliage, bright green twigs, large clusters of white flowers, and especially for brilliant bunches of scarlet fruit.

The flowers appear in June, and the fruit, which is ripe in September, remains on the tree during the winter.

No. 24.—*Amalanchier canadensis*, Torrey & Gray—the June Berry. This small tree is known by different names in different parts of the country. Some know it under the name of Service Berry, and some of our friends down east call it shad-bush, because its flowers appear simultaneously with the shad! Its abundant white flowers enliven the forests early in the spring, and its berries afford an agreeable repast for many of its feathered denizens. There are half a dozen different varieties, some of which have been ranked as species, but they are all now deemed only varieties of one species. I know of no useful purpose to which this small tree has been applied.

In the first and only volume of Transactions of the Illinois State Agricultural Society, there are a number of valuable essays on various subjects connected with the agricultural interests of the "Prairie State," and among them is one by Edson Harkness on Tree Culture. The arguments used apply with almost equal force to Wisconsin, for although we have at present in most parts of the State an abundant supply of timber, the time is not far distant when a scarcity will be felt; and should Illinois adopt the wise policy recommended in this essay, the time *may* come when she will be called upon to return to us a portion of the supply of lumber she is now drawing so freely from our Pineries. We cannot forbear to copy a few of Mr. Harkness' closing remarks:

"One great inducement for entering upon the general cultivation of evergreen trees upon the prairies, is found in the protection they must afford from the severe winds of winter. A belt of cedars, pines or firs, only two rods wide, on the north and west sides of a quarter section farm, would, even at twenty feet high, materially lessen the force of the winter blast—would *pay* as a protection to domestic animals, and to the growing of crops; and, with all, give a snugness and individuality to the farm which must be highly ornamental, leaving out of the account the great beauty of the trees. A district of quarter section farms thus protected, with good buildings, shade trees, orchards, and well cultivated fields, would render our prairie country one of the most charming portions of the globe. It will take time, labor, wealth and intelligence to bring about these things; but they will be done. There is wealth enough stored up in the soil itself, to render the whole country a garden; and there is industry and intelligence enough in our people to accomplish it.

"In this 'fast age,' when most people expect to realize a fortune in a few months or years, by the rapid growth of cities, or the increase in the value of lands, it may seem very foolish to engage in the cultivation of forest trees, which the planter can hardly expect to see come to full maturity in his own time. Still there is a feeling in the heart of many that it is not right to live exclusively for ourselves or for the present time—that it is right to look a little to the interests of those who shall come after us—that when we are about to leave the world it would be quite comfortable to reflect that things are, by our feeble efforts, in a better condition than we found them when we entered it. There are some so fanciful as to suppose that in a future state of existence, the memory of what they have done in this world may, possibly, have something to do

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with their condition—that their good or evil deeds will follow them. There are others who go so far as to say that we can in a future state look down upon our past career, and see all the consequences of each and every act of the present life. If such should prove to be the case, the man who plants a forest can enjoy its grandeur and beauty in all subsequent time. Every one will form his own opinion as to how these things may be. It is, perhaps, enough for us to know that it is a part of our duty to provide for the wants of our children, and not to confine our efforts exclusively to the things which pertain to the present, and to ourselves."

I am indebted to Dr. John A. Kennicott, the able and efficient corresponding secretary of the Society, for a copy of this volume.

FORM OF A CONSTITUTION FOR COUNTY AGRICULTURAL SOCIETIES.

The style of this Society shall be, "The ——— County Agricultural Society."

Its object shall be to improve the condition of agriculture, horticulture, and the mechanical and household arts.

SECTION 1. The society shall consist of such citizens of the county as shall signify, by writing, their wishes to become members, and shall pay, on subscribing, not less than one dollar, and one dollar annually thereafter; also of honorary and corresponding members. The payment of ten (10) dollars or more shall constitute a member for life, and shall exempt the donor from annual contributions.

SEC. 2. The officers of the society shall consist of a president, three vice-presidents, —to be located in various parts of the county, a recording secretary, a corresponding secretary, a treasurer, and an executive committee—to consist of the officers above named, and the ex-presidents of the society, and a general committee—one of the members of which shall be located in each of the towns or precints of the county. Three shall constitute a quorum of the executive committee.

SEC. 3. The recording secretary shall keep the minutes of the society. The corresponding secretary shall carry on the correspondence with other societies, with individuals, and with the general committees, in the furtherance of the objects of the society.

SEC. 4. The treasurer shall keep the funds of the society, and disburse them on the order of the president or the executive committee, countersigned by the recording secretary, and shall make their reports of receipts and expenditures at the annual meetings.

SEC. 5. The executive committee shall take charge of and distribute and preserve all seeds, plants, books, models, &c., which may be transmitted to the society, and shall have charge also of all the communications designed or calculated for publication, and so far as they may deem expedient, shall collect, arrange and publish the same in such manner and form as they shall deem best calculated to promote the objects of this society.

SEC. 6. The general committee are charged with the interest of the society in towns or precincts in which they shall respectively reside, and will constitute a medium of communication between the executive committee and the remote members of the society.

SEC. 7. There shall be an annual meeting of the society on the first Wednesday of December, at the village of ———, at which time all the officers shall be elected by majority and by ballot, with the exception of the general committee for the precincts, which may be appointed by the executive committee, who shall have power to fill any vacancies which may occur in the offices of the society during the interval.

Extra meetings may be convened by the executive committee, by notice published in all the papers of the county, which will insert the same gratuitously.

Nine members shall be a quorum for the transaction of business.

SEC. 8. The society shall hold an annual cattle show and fair, at such time and place as shall be designated by the executive committee, and also a meeting at the village of ———, on the first Tuesday of each month, during the months of June, July and August, for the purpose of examining, comparing and naming such specimens of fruits, flowers, &c., as may be offered for such purpose.

SEC. 9. No person shall be an officer of this society, other than treasurer, unless he shall be at the time of his election, or for a period not less than three years, at some time previously, actively engaged in some of the pursuits whose interest it is the object of the society to foster; and as far as practicable, in the opinion of the executive committee, the same restriction shall apply to the selection of the orator to deliver the annual address.

SEC. 10. Immediately upon the adjournment of the annual meeting it shall be the duty of the corresponding secretary to transmit to the corresponding secretary of the state agricultural society, an official report of the doings of this society, properly attested by the signatures of the president, secretary and treasurer, each to their own department.

SEC. 11. This constitution may be amended by a vote of the members attending any annual meeting.

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For the Farmer.

WESTERN VEGETABLES.

No one who has been engaged in agricultural pursuits in either of the Eastern or Middle States, and has removed thence westward, can have failed to notice the marked difference between the vegetable productions of the West and those of the East. This difference exists, not so much in the variety as in the qualities of one and the same species of plants. It is a fact well known to botanists, that generations of vegetables differing in appearance and in actual properties, are originated from the same source, by the peculiarities of soil and climate, and to this principle is, undoubtedly, owing the material change produced in many of our domestic plants, when brought forward in the rich soil of the West. There are a multitude of plants which have been so much improved by culture, even among the rugged hills and on the arid plains of the East, that it seems almost impossible they should be advanced toward perfection by a removal to the West; but after all, the change produced is too apparent not to be noticed and commented upon. Corn stretches up more stalwart and stately, and becomes, in fact, a different grain from that raised in Eastern States. Its properties of gluten, starch, and animal nutrition are in different proportions, while the size of the stalk, the leaf, and the ear are enlarged, and the whole made of coarser texture. Winter wheat is operated upon in the same manner, though its nature seems to demand a more stern and stony soil than that of most prairie lands. Yet it gives ample increase to repay the farmer, and while it may not possess the delicate whiteness of eastern wheat, it is possibly full as life-giving and nutritive. Spring wheat, rye, oats, barley, buckwheat, millet, and all other grains raised at the north, are here produced in quality much superior to the same vegetables of the East, and in the deep vegetable mould found here as in no other country, all kinds of garden roots and vines grow to enormous dimensions. They also are sometimes singularly changed in their natures. Potatoes, carrots, beets, turnips, and the like, are expanded by its genial nourishment until they seem hardly to be of the same class of vegetables as those from which they spring. All he various kinds of vines cultivated in this latitude here yield in the greatest abundance. Cucumbers grow to the magnitude of melons; melons are expanded to the dimensions of eastern pumpkins; pumpkins and squashes are swelled in their proportions until they seem no longer the vegetables designated by the names assigned them, but are mammoth productions deserving to be classed as of different species.

It would be a difficult matter to classify the plants of the West with those of the East, if one were to attempt the tracing out of any peculiar crosses in either place on this account. The Early York cabbage, which at the East seldom weighs more than two or three pounds, here becomes an old fashioned "drum head," often weighing more than double that number, while it at the same time adapts itself to the climate, and becomes later yearly. The Drum-head cabbage, which at the East rarely weighs more than ten or eleven pounds, is here brought frequently to twenty pounds. And so with everything else in the vegetable kingdom that has been cultivated upon the same parallels of latitude elsewhere. There is no falling off in any plant subjected to our soil if it belong to our climate. It is evident, moreover, that many other varieties of plants, of even inter-tropical nature, not at present cultivated thus far north, might be acclimated gradually, and produced here, while a great variety of fruits not at present known here, if once introduced to this region, would yield bountifully.

All kinds of plants adapt themselves to the soil and climate to which they are subjected and by which they are nourished; and to this faculty of gradual adaptation is owing many of our vegetable luxuries. By it, if the principle were thoroughly acted upon, we would become possessed of many more choice vegetable productions now considered beyond our reach. Vegetables no doubt grow the most luxuriantly in the soil and under the climate to which they are indigenous, if they receive the same amount of culture that is given them elsewhere; but like animals, and like man himself, they will become acclimated and inured to a very great extent, and more wonderfully changed in nature by these influences and by cultivation than any order of the animal kingdom. The deep strata of vegetable mould, to be found every-

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where upon our wide stretching prairies, is a powerful operative in changing the qualities and adding to the perfection of such plants as man has chosen for his food and sustenance.

It has been found by experiment that the same kinds of corn frequently kept for garden use, the "Early Canada," and other varieties, will become later and larger every year they are cultivated in this region, and that, too, where not permitted to mix or cross with any other. It is at first early, from the fact that it has been raised for successive years in the northern parts of Canada, where the growing season is short, and being hastily matured, it is small and inferior. On being removed to this country—the true native place of Indian corn—it does not at first grow during the whole season, but again adapts itself to it, growing more stalky, larger, and gradually later. And on the other hand, the reverse of this when the mammoth "dent" of the West is transferred to Canada and the Eastern States. At first it will not well mature, owing to the shortness of the season; but if enough ripen the first year for seed the next, in the next it will have more nearly conformed, and so on until it has become genuine eastern and Canada corn, without the dent in the kernel, and presenting a very different appearance, in the field and in the measure, from the parent stalk and ear whence it started. Canada corn is transformed by this soil and climate until it becomes mammoth dent, growing ten or twelve feet in hight; and the soil and climate of the north and east may again dwarf it back to its former proportions. The climate of the south-western States, however, presents a still wider contrast and the opposite transformations are there more speedy and discernible than at the north-west. These facts known of corn are also true of most vegetables, as can be traced in the history of cultivation, which has made nutritive food of weeds, and choice fruit bearing trees of very inferior shrubs.

Wheat is now considered the best grain of which bread can be made. It contains the greatest quantity of gluten and starch, and these are the most essential qualities required to render vegetable food of this kind choice and wholesome. It is probably raised with most success in Belgium, and in the countries bordering on the Baltic and Mediterranean Seas, in Europe; but the original plant is found growing wild in Afghanistan, Beloochistan, on the shores of the Black Sea, and in other parts of Asia. Cultivation, soils and climates, have produced the many varieties now cultivated in almost every country in which it can be raised with profit. Wheat is a costly grain to produce, but the people of many lands will not deny themselves its luxuries on that account. It can be raised in this latitude and on this soil as well, undoubtedly, as in any other part of the world; but the land needs subduing, and freeing from the remains of its wilderness of prairie grass, before it can be raised with the greatest success.

Barley may be cultivated here with success. It does not require a long season so much as it requires a wholesome soil, but here it can have both. In Spain two crops of barley are harvested in a year. In Lapland, it is frequently harvested six weeks after it is sown. Its use with us, however, is only nominal. It was once the chief bread grain of Southern Europe and the British Isles; but it has fallen into disuse. Its native country is not definitely known, but it is of great antiquity, having been known to the ancient Romans and Egyptians.

Oats are found growing wild in some of the Western States, and of course can be produced here in great perfection. The oat plant is hardy and delights in a cold frosty climate. In some parts of Canada the land is fitted for the seed in the fall, and it is sown in the spring while the frost is yet in the ground, so that the harrow can scarcely cover it with loose dirt. In Scotland this grain is raised in its greatest perfection, and oat-meal is much used for cake and porridge. This grain is found also, as a wild weed, on the island of Juan Fernandez, and there is a kind of wild oat very troublesome as a weed in England.

Rye is very little cultivated in this country at present, except for its beautiful straw. The failure of the wheat crop at the East, however, threatens to bring it back into use there, and the real old-fashioned "rye-and-Indian," may again become a popular diet in that region. It ranks next to wheat as a bread grain, and is used for food to some extent in Russia, Germany and France. It

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luxuriates in this soil, but the soil is rich beyond its demands, for it will grow full-eared and of the brightest straw in lighter and more sandy places. All its varieties, like those of wheat, barley and oats, have been produced from an inferior kind of grass, by cultivation.

Millet is a grass the seed of which has been improved by cultivation. It has been long cultivated, and used for food, in various parts of Africa and Southern Asia. In Egypt and Nubia it is used for human food and for the fermentation of beer; but in general it is cultivated more for animal fodder than for the sustenance of man. Cultivation and difference of climate have produced several varieties, some of which will grow to the height of six or seven feet. Our western soil is most admirably adapted to its nurture, and cannot fail to effect the production of new varieties, or some change in it for the better.

Buckwheat flourishes here and gives most abundant returns. As a general thing, this grain is much neglected in older countries—being carelessly cast upon fallow lands, to kill out weeds and fit them for the after wheat crop, or it is sown upon poor sandy ground, which serves to degenerate it and keep it but little superior to the original weed that grows wild in many parts of America. Its qualities may be much improved upon here at the West, and its nature and analysis rendered quite different. This grain is not apt to run into varieties, and seems to partake of the nature of the soil only in as far as its growth is concerned. As a grain it but very little resembles wheat, although its name would indicate that it does. The name is from the German *beech-waizen*, (beech-wheat,) from the resemblance between the seeds and beech-mast. Its nutritive properties are far inferior to those of wheat. It contains but little gluten and starch, but has a bloating quality, which is very deceiving and sometimes injurious. No thorough-bred jockey is unacquainted with its effect upon horses, and it is the same upon all other domestic animals. It is most excellent for speedy fattening purposes; but the flesh created by it possesses little vitality, and less solid substance. Its effect upon man is nearly the same—often injuring the purity of his blood, and making him doltish and sleepy.

Peas and *Beans*, though they do not both require the same kind of soil, find each abundant sustenance in a soil as well stored with all kinds of vegetable aliment as is ours. They are not much cultivated here at present as a field crop, but from their culture in the West we must expect a numerous progeny of variations and improvements upon the same vegetables as raised at the East. There are many kinds of peas and beans, early and late, and there are numerous instances of their changing in size, season and substance, as they have been changed in place. Both grow wild in America.

Each succeeding year must furnish new proofs of Western fruitfulness. Mammoth squashes, gigantic corn, monstrous pumpkins, melons, cucumbers and cabbages, will not be the only astounding vegetables on exhibition at our agricultural fairs. Choice fruits will come teeming in from new orchards of improvement, and every branch of our Western agriculture will rejoice in success and abundance. A. J. M.

A VOICE FROM THE WILDERNESS.

The following letter smacks so heartily of the new country, with its rustling leaves and fragrant pines, and calls back so vividly to memory our own Pioneering in the eastern portion of the State, nearly twenty years ago, that we are constrained to give it to our readers, notwithstanding its length. It is well for the people in the older portions of the State to know how rapidly the new country is being conquered. We think the writer draws somewhat upon imagination for his facts—still, we know from a brief interview, that he is one of the real Boone stamp, and will make his mark, though already turned of three score years. Success to him:

VALLEY OF CANAAN,
CHIPPEWA CO., WIS., Jan. 5, 1856.

Here in my lonely but comfortable log cabin, 1,500 miles from the city of New York, and seven from my nearest neighbor, I sit down, after perusing a package of twelve copies of your useful paper, of which, after the 1st of April next, I hope to see a copy in every cabin in this thriving township—I say, I have been led to write to you and add my voice to your so oft repeated advice to the citizens of fluctuating New York, to go West, and there for a trifle procure a home that hard times or depression cannot rob them of,

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and to confirm your judgment, I shall cite a little of my own experience.

In consequence of the derangement of business and the severe pressure of the times, about fourteen months since I left your city in search of a farm, for a permanent residence for my family and myself. Since that time I have journeyed far and wide through many of the Western States, but could not get hold of anything to suit me until I was led into Northwestern Wisconsin. I landed at La Crosse, a flourishing place on the Mississippi river, and, through the gentlemanly kindness of Mr. Lord, the Register of the Land office there, I was persuaded to visit this town. On the 27th of July last not a foot of land was as yet entered in it. He informed me that it was as good prairie land as there is in the world, well watered, timber on or adjacent to it. He also furnished me with plots of the four adjoining towns, and told me to go and take my choice; that it was in the immediate neighborhood of a very extensive pinery, that would furnish one with a market at his own door, better than New York market, and where a man's produce would bring him more than it would in New York city.

Well, I came here in company with two gentlemen from New York, and I had got but two miles and a half into the town before I was satisfied, and remarked to the gentlemen that the land suited me, and fixed upon a quarter section. They both located alongside of me. On the way to La Crosse to enter the land, they bought a mill site on the line of the adjoining town; it had a few days before been entered at the Land office for $100. They paid a trifle over $100 to the party. Last month it changed hands again, and was sold for $3,500 in gold. It is one of the best sites in the State, or in the world, and could not be bought to-day from the parties now in possession of it for $20,000. They have appointed me their agent to lay out a town in its immediate vicinity, erect a saw mill planing mill, sash and blind factory, and all necessary buildings to improve the place forthwith. The mill is to cut 80,000 feet per day of timber, as good as can be; the land produces from 25,000 to 30,000 feet per acre, (cost here $1,25 per acre, in New York, $1,00,) and the lumber when sawed is worth $18 per 1000 feet. Beat this at the East if you can. I am an old and experienced lumberman, and am convinced that this is the greatest lumber country on this continent.

We have four towns adjoining us, that will make five hundred rich prairie farms, and timber within a short distance, that will give to each farm forty acres. There is now about one half of them taken up by actual settlers, that move their families on here early in the spring. The remainder are still in market, and many of them I consider are as valuable farms as can be found in the Western country. There is a home here for enterprise, a home for industry, and soon there will be an opening for intellect and talent, and Chippewa county will stand up to many of her sister counties that are at present somewhat more advanced. It is destined to take the lead; for my word for it as a gentleman, when we visited this town last summer, it was a perfect "Garden of Eden." Flowers grew in great profusion, deer bounded through the wood, as they still do, and prairie hens were almost as plenty as birds, and speckled trout abounded in the brooks and streams; we also have a great many grouse and other game. Wheat brings two dollars per bushel, and everything else in proportion.

Yes, sir, soon such a farming country as this, and such a class of enterprising people as are now settling it, will support a village, or even a city, and next year this time I expect to hear on the ground on which I am now writing, the merry peals of a West Troy bell, calling together this prosperous and happy people to return thanks to the Almighty for the blessings He has so profusely showered down upon them.

I am possessed of 420 acres of prairie land, and 80 acres of timber—160 acres of which I received from the United States government for my services in the war of 1812, on Brooklyn Heights. Besides this, in connection with a gentleman from Albany, N. Y., I have 1,000 acres more, which we expect to convert into a mammoth farm this spring, and, at the present prices of produce here, we can clear the price of the land, stock, buildings and all improvements, in three years; then the improved farms will sell for $25 to $30 per acre.

This beautiful valley is located on the O'Clare river and Bridge creek, with many beautiful streams of clear cold water running to them. The springs are all soft water; there is no limestone here, and a more healthy country there is not on the globe. There never has been a case of fever and ague here; we are about half way between Black river falls and Chippewa falls, and 50 miles from the Mississippi river. Some of your very best families have had the wisdom to break loose from a vaccillating, precarious city life, (and becoming more so every day,) and through me have located and entered farms in this valley. May God grant that this may meet the eye of many of your good people that will do the same thing before it is too late, and secure to themselves a beautiful farm, which with prudence and economy, will be worth in three years several thousand dollars, with an abundance of

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all that mortal man can wish for, for I do not think that in this immediate valley, where there will soon be a village or city, mills, churches and schools, there will be a good farm to be got after the first of May next, at government prices. When I sit here and reflect what my situation has been, and what the situation is of many, very many, in your city, it reminds me of the advice that Mr. Secretary Corwin gave to a young man that was applying for a clerkship. He said, "Young man, go West—squat, build you a cabin—live like a freeman—I may give you a clerkship to-day—you may not have it to-morrow; but if you own an acre of land, it is your kingdom; your cabin is your castle; you are a sovereign, and you will feel it in every throbbing of your pulse, and you will thank me for thus advising you."

Labor is very high here—carpenters and masons get from $2 to $2,50 per day and boarded; laborers, $1,50 and boarded. But in fact it is hard to get labor at any price. Land is so easily obtained, that almost every man is a sovereign; he may go and pre-empt land, and if he can manage to get in a crop, the first year's produce will more than pay for it. There are many in this Western world—no longer ago than two or three years—that came here without a second garment to their backs, and scarcely a dollar in their pockets, who now are able and wealthy farmers, and can boast of their broad acres, got by their own industry.

I have already made this communication too lengthy; but, in conclusion, through your extensive medium, I would say to the good people of New York that none need despair, for the writer of this has this day arrived at his sixtieth birth day, and he tells you and them that he intends to open 1,420 acres of this virgin soil the next season. I would also add that about three months since I located a 160 acre warrant within half a mile of the village site, for Mr. S., an engraver, in Fulton street, New York, and I have just been offered $5 per acre (in gold) for it, and have written to him to that effect. The warrant cost him about $1 per acre in New York, and he would thereby make $640 off of one quarter section of land. Every person now has the same chance. Good locations are yet to be had; and, in fact, I think that some of the very best are yet to be taken up. If this should meet the eye of any that would desire more information from this land of plenty, direct to "J. G. Y., Black River Falls, Jackson Co., Wisconsin," and I will cheerfully give it, and locate their land for them too. VETERAN OF THE WAR OF 1812, in the N. Y. Herald.

IF YOU would test the fidelity of your friends, show them only the reverses of your fortune.

GRAVEL, GROUT, OR CONCRETE BUILDING.

In relation to the above mentioned kind of building, we would say that we have had considerable experience in it ourselves—having put up some half dozen such buildings, of different dimensions, first and last, among which was a barn—34 by 40, and 18 feet high above the floor—built late last season.

We dug our sand and gravel out of the cellar, in abundance, notwithstanding we did not strike gravel until we had dug four feet deep—and the cellar was only a little wider than the barn floor. It took about 150 bushels of lime for the gravel portion of the wall; which, by the way, we set on a good stone foundation, sunk below the frost and laid up in lime mortar. We used the floor plank for curbing, and found them very stiff and good. We also made it a point to work our gravel mortar pretty thin, and in putting it in the moulds, spread it in layers of about three inches deep, into which we bedded thin quarry stones, as close and snug together as possible, making it thereby an almost entire solid stone wall. We were careful to have the mortar cover the stone, on the out sides, so as to leave a smooth even surface to the wall. To tie it lengthwise, and at the corners, we put in an occasional small fence rail; these we locked, or nailed together at the corners. That prevented cracks, which are a little apt to open over the windows and doors, or at the corners, if there is the least give to the foundation. It is an indispensable safeguard, as experience has fully taught us. Good bridge timbers must be put over all the windows and doors, as much as in brick or stone building; as the least give in any such place will make a crack. It is also important in making the mortar, to strain the lime through a box as carefully as in making plaster mortar; as any lumps that go into the wall will slake and crumble out a piece, if near the outside.

It is also a nice, particular job to place the curbing or moulds, and make them fast, so that they will not move when the mortar and stone are packed in. We have done it, and have seen it done in different ways; but on the whole, prefer to set up temporary standards, outside and in, using the rafter or scantling timber for the purpose. These standards can be stay lathed to their proper

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places, and strips nailed across occasionally, to stiffen them. Inside of these, the plank can be slipped up and down at pleasure, and all the time kept in their proper places. It is well to put bits of shingle between the planks and the standards, which can be taken out and leave the plank loose, when necessary to raise them up.

We have said thus much, in the way of items of our own experience, and observations, in gravel or concrete building. They may appear trifling to the new beginner, and hardly worth notice; but their value will be better appreciated before one gets a great way in a job of the kind. We will conclude by adding further, that our own experience has taught us to think well of this kind of building, when materials are convenient. We consider the great objection that has been raised against it in many quarters, has almost wholly arisen from the promulgation of the common error—that it was a kind of building that any common farmer could carry on and manage, as well as a mason or an experienced builder. Now, this is a great mistake, and any body of common sense can see it. To build even a log house, fit to be occupied, requires considerable practical skill and experience. How can a common farmer square the foundation of a building, or level it?—how can he carry up a corner true and plumb, without first learning how, and having tools to do it with? No more than an unpracticed hand can make a good boot or bureau, the first time. We repeat emphatically, that what is wanting in this kind of building, is a good skillful foreman. Common laborers can do all the work of compounding, and putting up the wall, when shown how and constantly watched over, but not otherwise.

The fact that inexperienced, ignorant men have often been induced by the advice of mere theorists, or their own over confidence, to undertake this kind of building, resulting as might naturally be expected, in ungainly, crooked, whopper-jawed, and cracked walls, is no evidence whatever against the system, but only an evidence of the folly of men, in undertaking what they don't understand. We do not hesitate to say, and we believe we understand the subject pretty well, that under ordinary circumstances, and at the present prices of lumber, we can construct the walls of a building in this way, for about one half the cost of common brick, or stone work, and about two-thirds the cost of wooden walls.

The barn of which we speak has proved very warm and good during the past cold winter—the cellar not having frozen at all, whilst almost every house cellar in the State has frozen more or less. It will be equally cool and pleasant in the summer. Thus far, there is not a crack in it, rather to our surprise, as some of it was put up so late in the fall as to have frozen before it was half dry. It is important to put up such walls early in the season, that they may get as dry and solid as possible before frost.

Our barn wall, above the foundation, of the size before stated, cost us from $200 to $250, including lime. To all appearance, it is a great deal better than wood—needing no painting. We doubt not that it will grow harder and better from year to year, and long outlast its builder. It is a little rough in spots, owing to want of experience in the man who attended to a part of the work; but on the whole it is a creditable enough job, and a good *standing* argument in favor of gravel building. Anybody curious to inspect it, can do so by calling at our farm, four miles north-east of Madison, on the Portage and Columbus road, at the well known and time honored sign of '76.

Any one wishing to make further inquiries on the subject, is at liberty to do so, and we will answer in the next number of the FARMER.

AGRICULTURAL COLLEGE.—A bill has passed both branches of the Maryland Legislature to establish and endow a State Agricultural College. The bill provides that an annual appropriation shall be made by the State of six thousand dollars, as soon as fifty thousand dollars shall have been subscribed in aid of the enterprise by individuals. In addition to the teaching of agriculture as a science to its pupils, the act makes it obligatory upon the instructor in Chemistry carefully to analyze all specimens of the soil that may be submitted to him by any citizen of the State, free of charge, and furnish the applicant with a statement of the result.

PRIDE is the necessary evil with which Nature fills up the waste places of the brain. The less she gives of mental machinery, the more she supplies this airy substitute.

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For the Farmer.

GEOLOGY—MINERAL WEALTH OF WISCONSIN.

MESSRS. EDITORS—In continuation of these random sketches, it may not be out of place to notice here some of the more important minerals and metals of the State. Of the ores, the most important because most sought after, is the lead. The "region" proper, occupies most of the surface of three counties in the south-west corner of the State. Several thousand of our citizens are employed in the several avocations of prospecting, mining, raising, smelting, &c. The yield for many years, has varied from 30,000,000 to 70,000,000 lbs. per annum.

The lead rock, proper, is a magnesian limestone—a hard, rough appearing, gray rock, filled with flint nodules, and abounding in cavities, fissures and caves. The surface has been denuded of several hundred feet of original superincumbent deposits, of which the only remaining monuments are the mounds. The manner in which the mineral is found deposited, affords abundant room for the speculations of the scientific who adhere to any one theory of the origin or repletion of mineral veins. Accordingly we find in the published works of such gentlemen, that one assigns the whole deposits to an unquestioned origin in an aqueous solution, while another is quite as certain that they are wholly to be referred to internal heat, and injection from beneath. Each side may be correct in particular cases—but a personal inspection of hundreds of diggings, satisfies the writer hereof that no *one* theory will suffice to account for the origin of our lead deposits—that while injection and sublimation can alone account for immense masses, and "cog" or cave mineral, it is entirely certain that water has played an important part, and many deposits must be referred to its agency. It is probable, also, and apparently certain, that the agency of electricity can only account for the deposit in certain locations. Any one, we think, making a careful examination of the whole country, and having no pre-conceived theory to sustain, will arrive at this conclusion. But not to extend this notice of *theories.*

This layer of lead rock runs out northward, near the Wisconsin, and eastward along the Sugar river valley. If found elsewhere, it is as outliers, or in layers too thin for permanent mining operations. It thickens towards the south and southwest, and a few miles from the State line, south and west, is covered by superior deposits; An important problem to be solved in the mines, is the depth to which they can be worked, since generally, the deeper the mine the heavier and more valuable the deposits. One inference seems unavoidable—that no digging will ever exceed 500 feet. The lead rock rests upon a stratum of blue fossiliferous limestone, of variable thickness. That, upon a yellow, somewhat porous limestone. Underneath this is a ferruginous sandstone, about forty feet in vertical depth The "lower magnesian"—nearly identical with the "upper"—succeeds, when we reach the lower sandstone, which, further north, is found resting directly upon the granitic or primary deposits. It is inferred that the granite would be reached by about 2,000 feet digging in any part of the mines. The blue and yellow limestones can scarcely be considered as lead-bearing, although mineral in certain localities is found in them. There is, however, abundant reason for hope that when shafts shall penetrate to the lower magnesian deposit, in the south part of the mining district, immense treasures will be found. As compared with foreign mining, however, ours must ever be shallow. This ought not to be taken as an evidence of lack of permanence. No equal surface in the world is as rich in mineral as this. If the mines have not depth, they have breadth. The diffusion is general, so much so, that it is doubtful if there is a single section in which it has not been, or may not be found in some quantity.

Connected with the lead, most generally in the same lode, are found the ores of zinc —the "black Jack" and "dry-bone" of miners—in immense quantities. The "dry-bone" is one of the richest ores in the world, yielding on analysis, from 20 to 40 per cent. In any other country but this, millions of tons of this ore would not be suffered to lie useless upon the surface, regarded as a positive nuisance. "Black Jack" is even richer, but more difficult of reduction. Where is Yankeedom, that these treasures still remain worthless for every useful purpose?—that we buy zinc, when we ought to import it?

Iron ore is extensively diffused over Wis-

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consin. The mine near Mayville, in Dodge Co., is adequate to build all our railroads, if fully worked. On the head waters of the La Crosse, the writer found, some eight years since, a layer or sheet of this mineral, which measured over eleven feet in thickness. It is also very largely developed on Black river. In both cases the ore in arenaceous. Over whole sections and townships, even in the southwest counties, iron ore is found, in places entirely covering the surface soil. Extensive deposits have also been found upon the Baraboo river. In the country margining Lake Superior, this mineral exists in mountainous masses.

The copper mines near Mineral Point, have turned out already 15 or 20,000,000 lbs. of this metal. Like a great many other important interests in that section, this one had to succumb to the California gold fever, and the mines are unworked. A similar mine has been opened at Mt. Sterling, in Crawford Co., of great promise, but as yet it remains useless. It has also been found upon the Baraboo. The ore is a green carbonate. In all parts of the State covered by drift, masses of pure native copper are from time to time found. As this drift came from the northward, we have to look there for the parent bed. Every indication, independent of actual discovery, seems to render certain the existence of an unlimited store of this metal in Northern Wisconsin.

Not to enlarge too much upon these different mineral ores, each one of which might occupy the space of this article, advantageously, let us look for a moment at the pecuniary results to our people from the almost total neglect of manufacturing interests. We send millions of pounds of lead East every season, a part of which is cast into small bars and shot, and sent back to us for sale, at a *moderate profit*. A large portion is worked up into paint, but manufacturers cannot afford to send us much of *that*—they substitute kegs of ground whiting and powdered soap-stone, to be daubed on, and deface our buildings. The miners, whose villages are paved with zinc ore, as well as the balance of us, get zinc mainly from Germany. The copper used in the State, is almost all brought to us across the Atlantic. For iron, we look to England mainly, and to Eastern States for the balance. Our glass is all imported; while to make the balance equal, our sand is shipped a thousand miles to the factory. There is no better glass sand in the world than in this State. We buy water-lime for cisterns which has been brought a thousand miles, and not unfrequently plaster it on to walls built of the rock of which this cement is composed, taken from the excavation itself. We are equally shrewd in buying mineral paint, beds of which abound in numerous localities. It is not necessary to enlarge this list. The time must come when Wisconsin sportsmen will not shoot Wisconsin birds, on the surface of Wisconsin lead mines, with balls or shot made from Wisconsin lead which has traveled one or two thousand miles from the State, and back again, at a large advance on original cost. We have even some hopes that a time will arrive when we shall not be importing Spanish whiting, which costs the bare shoveling where it is found, and putting the miserable caricature as real paint on our dwellings, under the head of "Extra," "No. 1," "No. 2," &c. And who knows but our *lager* and whiskey would be just as conducive to bodily excitement and mental dullness, if drank from Wisconsin glass ware? Every *light* in our windows, is a reflection upon our folly in buying our own products in an altered form, and paying away our millions to Eastern enterprise, when that enterprise should be here. Wisconsin must manufacture or *bleed*, for all time to come. In the progress of manufactures, every industrial pursuit has a deep and abiding interest—but none more than the agriculturist.

In closing this rambling article let me define, what I had intended in another place, the meaning of certain terms. A "lead-bearing," or "copper bearing rock," or other rock deposit holding metalic veins, means simply, that certain rocks have a capacity, from peculiarity of structure, to hold and retain certain metalic substances. It is the structure of the rock, and not always its chemical composition that determines this. So uniform are the laws of Nature, that a person acquainted with any given layer, and its peculiar structure, can at once decide what, if any, are its metalic veins. Hence the folly of many who dig for metals in deposits which a practical knowledge of the elements of geology would at once show to

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be utterly futile. A great deal of such work has been done in this State. Even sandstone has been mined for lead!

Yours, &c., H. A. T.

CHIT-CHAT ABOUT FAIRS.

The Premium List and Regulations for the next annual State Fair, published in the April number of the FARMER, has undoubtedly been carefully examined ere this by our numerous readers. How many have determined on getting up something appropriate for the occasion? How many of our farmers are arranging to compete for the premiums on field crops? How many mean to raise 100 to 150 bushels of corn on an acre of their best land, tilled just the best they know how? How many will raise 50 bushels of wheat per acre? We think the time has come when some of our best farmers can afford to test our soil in this way and see what it can do.

Michigan, Illinois, and other Western States outde each other in these things, and report surprising crops. It is high time Wisconsin was heard from in the same way. Where are our men who have pluck, perseverence and energy, to try it? Where among our 75,000 farmers have we a dozen or twenty men who will measure off their acres, and see what they can do? The careful study and observation necessary to accomplish the best results will be a good school to any man, in the way of perfecting his agricultural knowledge. Those who undertake and accomplish anything extraordinary, may perhaps have an opportunity of getting their soils analized by the State agricultural chemist, in addition to their premiums.

Rouse up, then, we say, ye young and middle aged farmers! Send in your notices according to the rule, by the 15th of June, and put yourselves on the record. If you win, it may be the stepping stone to the Governorship of the State—who knows? We hope erelong to see an occasional farmer Governor, when the mere politicians and tricksters are killed off, or banished up "Salt River," whither let us hope they will all emigrate and settle permanently, "leaving their country for their country's good!"

Those who do not go into premium field crops, should as far as practicable go in for something else—a fine animal product, or article of manufacture, no matter what it is in the line of utility or taste. Let the stock breeder bring his fine animals, and the manufacturer his cloth, flour, agricultural implements and machines, or wooden ware. Let the inventive mechanic bring his handiwork, and take his place among the first ranks in the crowd—being conscious that to his ingenuity the world owes a great deal of its present rapid advancement.

Then, the Ladies—where are they and what are they planning for the fair? Certainly they will all want to go for a ride when the time comes round. Then plan up something for the show. No matter for a patchwork quilt; that shows a world of labor thrown away. See how neat a gentleman's shirt you can exhibit of your own make, or a suit of children's clothes, all complete, having reference more to comfort and health than to naked neck and arms. The best place to exhibit the children's clothes is on the children themselves, especially if they are large enough to enjoy and profit from the fair. Let the dairy woman bring her products—her butter and cheese. Certainly the present high prices ought to prompt their manufacture nice enough for exhibition.

We think it will be well one of these times to offer premiums on model Housekeeping as well as model farming, and arrange to have the visiting committee drop in unexpectedly some Monday, washing-day, and give the premium to the lady who can glide through its innumerable annoyances and unpleasantness in the most quiet and good natured manner.

All that we have said applies with equal force to County Fairs, which, under the new law encouraging them, must spring up on every hand. Success to them all, we say; they are the schools in which to perfect our knowledge in our great main avocations of life. Let the County Societies and fairs be the academies in which material is prepared, and the State Society and fair the college of final study and graduation, turning out finished scholars who can creditably represent our young State in the great fairs of the nation. Such is our favorite theory of agricultural societies and fairs,; they should interlock and co-operate from the lowest walks of rural life to the highest, calling out every element in its turn, and making them all sub-

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serve one common end—progress and improvement.

There are those who think County Societies are all we need, and they are the same class who consider everything above a district school to be useless and aristocratic —minds that have but one idea, and that limited to their own county. It will not do for this fast business railroad age; we must post up on a larger scale. A Western State now-a-days that should not hold a State Fair, and that a good one, would be as much behind the times as was New Hampshire when she would not have any railroads.

In conclusion we say, success to Fairs, high and low; let us all plan to attend them.

AIR CURRENTS.

The farmer, residing upon the rich prairies of our noble state, feels little surprise that his soil yields products that can only be grown several degrees of latitude south of him on the Atlantic slope of the Alleghanies; and without further inquiry he attributes to his rich soil this wonderful difference. When the northwest wind sweeps down upon him with all its force, he adverts to the long sweep of prairie, where his hyperborean majesty gathers such headway that his touch becomes irresistable, for a solution of this apparent discrepency between the heat of summer and the cold of winter.

In these views he labors under a slight error, for while the soil of the state is rich, it is not natuarally a *quick* one. Those soils termed warm, quick lands, contain an excess of sand, and the best of these are the black sandy loams; while on the contrary, the lands of this state have a liberal base of clay, which gives them great durability, and renders them valuable for the staple cereals and grasses.

We must then look to some other natural cause than this to explain this difference, which is not only real but permanent.

When we come to a careful examination of the subject, and institute comparison, we find here a climate in many respects distinct from that of the Atlantic slope, with a system of air currents peculiar to the valley of the Mississippi, and to which we must attribute the marked difference of climate between the two sections.

When we cast our eyes over the maps of the *western world* and examine its air currents, we find the *trade winds* setting in from the coast of Africa, and passing west until they meet an impassable barrier, in the Andes or Cordillery range of mountains, which, running northwesterly, turns this immense stream of heated air northward, which is compressed in narrow limits between the West India Islands and the main land, and passing over the low sandy peninsula of Yucatan, is poured into the Gulf of Mexico, when it forces out the waters of the gulf stream eastwardly, around the capes of Florida. While the current of air passes north up the delta of the Mississppi, whence it branches off like a fan up the various valleys and tributaries of this great water course, and mingling in its course with the cooler currents that it meets in its progress northward, modifies the climate, and thus gives to the Cis-Alpine states a continual season of almost intertropical climate during the continuance of the eastern trade winds. But as these continue in the same direction only half the year, consequently this immense current of heated air is withdrawn, and the colder currents from the north are drawn in to supply its place. This change generaly occurs during the month of December, when we experience our sharpest frosts, and which prove so disastrous to peach, nectarine, apricot, and other tender fruits, to which the more favorable climate of summer had given promise of success. When from any cause the cold winds of the north have been kept in check until the first of January we may not expect our sharpest frost until some time in February.

The *January thaw* is as fixed and immutable as the *Indian Summer*, and equally as silent and mysterious in its course and progress. Each is ushered in amid the quiet of nature; the former coming from the southeast giving strong suspicion of its connection with the *African Simoon*, and its tropical origin. It seems to permeate and seek the deepest recesses of frost, and as the phrase is, breaks up his hold from the very bottom.

This wind, first striking the Atlantic slope, is slightly turned from its course by the mountainous ridge before mentioned, over which it passes and spreads itself thorough the great northwest, melting the snow and ice before it like the "gentle breath of summer." A peculiarity of this wind, and which fastens suspicion of its relation to the *simoon*, is the effect it has on all fresh meats, which are tainted under its influence in about the same length of time as though exposed in the same manner during the heat of summer.

This wind continues from a few days to as many weeks, when its force and power no longer holds in check the accumulation of arctic cold, which then sweep down upon us with unrestrained severity.

Thus it will be seen that we have the winters naturally belonging to our latitude while our summers are two or three degrees of latitude warmer than our neighbors on the same parallels. When we know this to

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be constant and among the fixed laws of nature, not more subject to change than other ordinary vicissitudes of climate, we should be admonished to take advantage of the one and to guard against the ill effects of the other. With all annual plants the severity of the winter is of little or no consequence, and with them we have only to use the same care as if grown in similar soil on the same isothermal parallel. But with biennial or perennial plants and trees the matter is a very different one, for in this case they are grown in one climate or parallel of latitude, and wintered, to all intents and purposes, in another. This will fully explain why so many varieties of fruit trees and shrubs, which appear to flourish so bountifully, are ruined by the severity of our winters.

That in the progress of settlement and cultivation of this state, timber will become more abundant, or at least more generally diffused, must be apparent to any casual observer. And that this is to be the equalizer of heat and moisture, is also another self evident fact.

Let us for a moment look at the effect of the forests in the eastern states upon the climate, and consequnt fertility of the soil.—The wood-land held a reserve of moisture, not only to supply the springs, but loaded the night air with dew, with which every shrub and blade of grass was dripping ere the morning sun "came up with his floods of light.

West a change has beenwrought by clearing off those immense forests, The trees no longer draw the lightning from the clouds to induce them to give down the gentle rain, but floods and drouths follow each other in almost uninterrupted succession.

The same phenomenon has existed here for centuries, that now obtains with our eastern friends, and drouth and flood alternately have been, with few exceptions, the order of the day. The hot current of air from the south has met the cold of the north and the clouds from the two sections have exchanged the electric shock and thus been induced to pour down their floods of rain, not in the gentle shower, but in torrents.—No gentle diffusion of electricity, no wood-crowned hills, no belts of timber, with their thousand points, scattered over our wide prairies, to silently form an electrical equilibrium between the earth and the clouds, to induce the gentle shower; had we not a soil of unsurpassed fertility and power of retention, this, instead of its wondrous products, would be one wild field of desolation. No one of the eastern states would produce a crop, with the unequal distribution of moisture which we receive; and yet they are on the downward road, stripping hill after hill of its woody covering, and calling down upon themselves all the fickle changes which the wayward air current may inflict upon them. Our state, on the whole, is not so deficient in timber, but its unequal distribution is the great cause of complaint. That more rain falls in the vicinity of our large bodies of timber than on the prairies is evident to any person of ordinary observation, who has observed the thunder showers of summer burst over some grove, or attracted by some jutting point of timber, or pursuing a belt of wood as it follows the winding of some petty stream; for such is the common, almost invariable course of local showers. Not so those storms that originate beyond our state and pass over it on their mission of moisture eastward.

Yet how many of these pass over us "dry," for the want of the wood-crowned hill or belts of timber, whose numerous spires would draw the electricity, and thereby induce the passing clouds to yield the much needed rain.

As the railroads are crossing our large prairies in various directions, and thereby placing them in advantageous proximity to market, they are now much sought after for cultivation and receiving that attention which their unrivalled richness so highly merits.

With an abundance of coal for fuel—for locomotives and manufacturing, they require timber for building, for fences and railroad ties; hedges and extensive orchards must follow. These will make a change in our climate, easily perceptible in a few short years. Let locust and other timber be grown in belts around the farm and fields to ward off the bleak winds, and in sufficient quantity to supply the use of the same, and we will have taken one step toward the upward rounds of the ladder, instead of standing at the bottom as now.

Wind like water seeks its level, and is checked in its course by the roughness of the surface over which it passes,—timber and mountain ridges are the most efficient in this respect, barring its progress. Hills and mountains we cannot make, but we can clothe a part of our farms with nature's stately covering, and thus give to our homes a comfort and attraction that will always give us a higher opinion of our frail humanity.

We hope this subject will attract the attention of the dwellers on our large prairies, and induce them to protect their homes and fields, so as to reap the full advantage to be derived from nature's law, which sends them, so constantly during summer, the bland breeze from the sunny south. [M. L. DUNLAP, in Ill. State A. S. Transactions.

Memory and Forecast just returns engage,
This points to youth, that on to age.—POPE.

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STOCK REGISTER.

ON ASCERTAINING THE AGE OF ANIMALS.

A correct method of ascertaining the age of animals is a matter of so much importance to the public, that a portion of time and space may be well occupied by this interesting subject.

In the following article, the opinions of the best authorities are combined and condensed, and presented in a manner that I hope will prove acceptable to your readers; in it I mention the more accurate methods of judging the age of the horse, the cow, the sheep, and the deer.

Animals are said to live about seven or eight times the length of the period which they take in arriving at maturity.

By observing the growth and decay of the teeth of some annimals, and by certain marks on the horns of others, we are enabled to ascertain their ages, with a tolerable degee of certainty.

The age of the horse is best known by the appearance of the incisive teeth, or nippers, as they are called; there are six of these in each jaw.

In fifteen days after birth, the foal, or milk teeth appear; these are rounded in front, and present a surface with the outer edge rising in a slanting direction above the inner; this inequality soon begins to wear down, and the mark in the center of the teeth which was at first long and narrow, becomes shorter and fainter. At six months old, the four nippers are worn nearly to a level.

At 1 1-2 years old, the mark in the central nippers will be short and slight; in the others it Will present a considerable change, and *all will be flat.*

At 2 1-2 years old the central pair of nippers or milk teeth fall out, and are replaced by two permenant teeth.

At 3 1-2 years, one on each side of the permanent nippers falls out and is replaced by a permanent tooth.

At 4 1-2 years, the two exterior teeth of the first set fall out and are permanently replaced.

All the permanent nippers are marked in their crowns with circular pits or furrow, which is gradually effaced as the tooth wears down. The size and shape of the marks being a very correct means of ascertaining the age of the horse up to the eighth year, but at this time the marks are worn out of all the nippers, with the exception of the two exterior ones, these having appeared a year later than the others, *preserve these marks in proportion.*

Some of the best authorities state that *all the marks* are completely worn out, at eight years, but in this opinion I think they mistake, an inspection of the mouth of an eight-year-old horse, will prove the correctness of the remorks I have made.

A Horse of three years old will have the central permanent nippers *growing*, the oth two pairs *declining*, six grinders in each jaw, the first and fifth grinders *level with each other*, and the sixth protruding; the sharp edges of the new nippers will be easily distinguished.

At 3 1-2 to 4, the mouth cannot be mistaken; the central nippers will have nearly attained their full size. A space will be left where the *second pair stood*, or the new ones will have begun to appear above the gum. The corner nippers will be considerably diminished, and the mark within will have become small and faint. At this period the second pair of grinders will be shed.

At 4 years the central nippers will have attained full size; the sharp edges will be a little worn, the marks will be *shorter, wider and more indistinct.* The next pair of nippers will be up, but they will *be small and deeply marked.* The corner nippers although reduced, are still larger than the inside ones; in them the mark is nearly effaced. The sixth grinder will have attained nearly full size, and the tushes will have begun to protrude.

At 5 years, the mouth of the horse is nearly perfect; the exterior nippers are quite up, and the mark in them is long and irregular. The other nippers are beginning to wear; the tushes are considerably grown, *the sixth grinder is up, and the third is wanting.*

At 6 years, the mark in the central nippers is nearly worn out, but there is a difference in color in the center of the tooth, with a slight depression in the same place. In the corner teeth the edges are more even, and the surface somewhat worn. The tush has attained full size; the third grinders is up, and *the grinders are all level.*

At 7 years, the mark is worn out of the four central teeth, and is also beginning to wear away in the corner ones. The tushes are altered in appearance; they have become rounded.

At 8 years old, the mark is worn from all the nippers of the lower jaw, with the exception of the two exterior ones, as has been remarked before; in these teeth a *very faint mark* still remains.

The nippers of the upper jaw do not wear so soon as those in the lower, for they are not exposed to as much work, consequently the marks in them do not disappear so soon as in the lower teeth, and a good judge may form a correct opinion of a horse's age by observing the marks in the nippers of the

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upper jaw, when they have been obliterated in the lower teeth.

Some distinguished veterinarians state, that after eight years, a horse's age may be known by the *shape of the nippers;* they say that at eight, the nippers are *all oval;* the length of the oval running across from tooth to tooth; but as the horse increases in age, the teeth diminish in size; they become a little apart from each other, and their surface becomes a little rounded.

At nine, the central pair of nippers *are rounded.* At ten, the others begin to have the oval *shortened.* At eleven, the second pair of nippers are *quite round.* At thirteen, the corner ones are rounded.

At fourteen, the faces of the central nippers become triangular.

At seventeen, *all the nippers are triangular.*

At nineteen, the angles are worn off, and the central nippers are again oval, but in a reversed direction, or from outward to inward.

At twenty-one, they are all oval, in the same direction first mentioned.

The age of the horse is always calculated from the first of May. Early foals acquire their teeth, and lose their marks, in proportion to their age.

After the eighth year, the age may still be ascertained by the state of the canine teeth or tushes. These are sometimes wanting especially in the lower jaw, and are rarely to be found in mares. Between the tushes and the first grinders there is a large open space. The grinders are six on each side of both jaws. They have their crowns squared, and are crossed with laminæ of enamel. The freshness of this enamel shows the youth of the horse, and *vice versa.*

The canine teeth or tushes of the lower jaw, appear at three and a half years, those of the upper jaw at four years. Till six, they are sharp pointed, *and at ten quite blunt and long;* at that time the gums begin to recede from their roots.

After a horse is ten years old, the teeth cannot be *relied on*, as a correct method of ascertaining his age. Yet a good judge may form a tolerably accurate opinion by the size, bluntness and discoloration of the tushes.

The eye-pits of horses of from ten to fourteen years of age, become gradually more hollow, and their eyebrows grayer, year by year. The bars or ridges of the palate are effaced in proportion as the horse advances in years.

In Horned Cattle the age is more visibly apparent, and more readily discovered by means of certain marks on the horns than by the appearance of the teeth. The horns of the cow appear to grow uniformly for the first three years, after this, each succeeding year adds a ring to the root of the horn; so as the age of the bull, or cow can be easily ascertained by counting the *first ring four*, and adding the remaining ones.

The ages of cattle may also be known by the shedding of the teeth.

In Sheep and Goats the number of the knobs on the horns indicate the age of the animal.

The ages of sheep up to a certain period, may also be known by the teeth.

At one year old, sheep lose the two front teeth of the lower jaw; six months afterwards the two adjoining teeth also fall out, and are slowly replaced by others. Young sheep are easily known by the uneven appearance of the teeth, and the exact age is ascertained by the particular stage of growth in which the teeth appear, as they progress to maturity. At three years old, the teeth of the sheep have arrived at full size; *they are all even* and very white, and the animal is said to have a *full mouth.*

As the sheep advances in age, the teeth lose their enamel—become very much discolored—and afterwards blunt and uneven.

In some parts of Great Britain and Ireland, farmers resort to the cruel method of removing the teeth of old ewes, when they wish them to feed in turnip fields, without injuring the bulbs of the turnips.

In such cases the front teeth are pushed or chiseled out, and the sheep pick off the turnip tops but cannot injure the bulbs.

Deer shed their horns annually, and in this class of animals, horns are, with a few exceptions, peculiar to the males. The female Reindeer has horns, and they are subject to annual shedding like those of the male. The horns of the deer are at first spear-shaped, without antlers or branches, but each succeeding year of their lives, adds one or more branches until a certain number are produced, afterwards the age can be ascertained by the thickness of the horns, and the size of the knobs which connect them with the skull.

In the stag, the young horns, or spears fall off in the second year of the animal's life, and are replaced by others having a single antler called a fork. This falls during the third, and is replaced by one bearing three antlers. In the succeeding year these too fall off, and are replaced by others which bear *four antlers*, and these on the fifth year, are replaced by other which bear five, and so on till the eigth year. Some assert that the number of branches continue to increase until the tenth or twelfth year.

In the song of Blanche, the "crazed and captive Lowland maid," Sir Walter Scott alludes to the horns of the stag in the following lines:

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"There was a stag—a stag of ten,
Bearing his antlers sturdily,
He came stately down the glen,
Ever sing hardily, hardily,"

In a note on the "Lady of the Lake" the allusion is explained thus; "Having ten branches on his antlers."

Naturalists assert that after the age of eight years, the number of branches on the antlers do not increase regularly.

EDWARD MASON, in Michigan Farmer.

OVER-FED ANIMALS.

By over-fed animals, reference is now had to such as are offered for exhibition at our State shows; and more particularly the short horn cattle which are brought out.

The object of the owner or exhibitor is to show his animals to the best advantage. He accordingly blankets them, and feeds them all the corn-meal they will eat, and in fact omits nothing which will put them forward at the quickest pace possible. They of course look well when brought out to exhibition. The farmer who has seen cuts of fine beasts in the papers, and read descriptions of them, but had doubted whether any living ones were made to come up to the pictures, is amazed whan he sees these fine cattle. So far so good. He is tempted to buy; and inquires what keeping these animals have had. He is told, "nothing extra," and purchases, with the expectation that ordinary keeping is to maintain such a style of animal as he has acquired. He will discern his mistake very soon when he tries it. A beast ruined by a forcing hot-house process will neither bear rough treatment itself, or give power to its offspring to do so. In truth, the breed is made tender in constitution by over pampering, There is of course no necessity for such excess of feeding and grooming as our show animals often get. The short-horn cattle have qualities which manifest themselves to advantage with fair treatment. Over-feeding is not beneficial to them in the long run, nor to their purchasers in a run long or short. Show animals ought to be in working condition; and committees ought to understand their business so as to make beef a disqualification for premiums except in fatted cattle. Breeding cattle are fit for no use as such when made ready for the shambles, and our hope is that the State and other societies will so regard it.

[Prairie Farmer.

TWO FAULTS.—A horse dealer, who lately effected a sale, was offered a bottle of porter to confess the animal's failings. The bottle was drank, and then he said the horse had but two faults. When turned loose in the field he was "bad to catch," and he "was of no use when caught."

RECIPES FOR ANIMAL DISORDERS, &c.

COSTIVENESS IN SHEEP.—Two tablespoonsfull of castor oil, every twelve hours. Or give one oz. epsom salts. This may be assisted by an injection of warm water, weak suds and molasses.

SCOURS IN SHEEP.—A pint of new milk, thickened with wheat flour. To be given twice a day till the discharge is stopped.

ITCH IN SWINE.—Rub the animals with equal parts of lard and brimstone, and put them in a clean pen.

SCOUR IN HORSES.—Put one pint of good gin, and one oz. of indigo into a bottle, and shake them well together, and administer in one dose.

RING BONE.—Mix equal parts of spirits of turpentine and common lamp oil, and apply to the part affected night and morning, rubbing it well into the hair, around the edge of the hoof.

WOUNDS IN SHEEP.—Take the leaves of the elder tree, and make a strong decoction, and wash the parts affected two or three times a day, and you will not be troubled with flies or worms. It also removes fever from the wound and is healing.

CURE FOR BOTS.—Make some sage tea, and sweeten it well; when about milk warm, drinch the horse with it. If it turn out to be the cholic, and not the bots, the sage tea will be good for that.

ANOTHER REMEDY FOR BOTS.—A half pint vinegar, half pint soft soap, half pint good gin, half pint molasses; shake well together, and pour it down while foaming. It will cure in five minutes; never known to fail.

TO DESTROY LICE ON CATTLE.—Camphor dissolved in spirits is an effectual agent, and may be used at all times, even in very cold weather, without the least injury to the cattle.

MURRIN IN CATTLE.—Take one quart of the juice of Jamestown weeds, and one teaspoonfull of saltpeter. This is enough for an ox or a cow; for small cattle, one-half or one-third the quantity is sufficient.

FOR CUT FEET AND LEGS WITH SHOE CORKS.—Take one oz. of gum camphor, and one pint of vinegar. Apply three or four times a day, and your horse need not stop work.

BLOODY MURRAIN.—Take white oak bark from the tree, as much as you can hold with the thumbs and fingers of both hands. Boil it in one gallon of water for a short time. Then pour off the water, and dissolve in it a lump of alum, the size of a walnut, and a lump of copperas of the same size. With this mixture drench the animal, and a cure will soon be effected.

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For Bruises and Sores.—1 pt. alcohol; 4 oz. origunum; 2 oz. oil hemlock; 2 oz. ammonia; 4 oz. castile soap; 2 oz. gum camphor. Mix and shake well before using.

Horse Distemper.—When the horse has the appearance of coming down with this disease, put a teaspoonfull of spirits of turpentine on the top of his head, between the ears. It may be repeated after three days if necessary.

Fresh Wounds in Horses, &c.—Take one lb. of sal. ammonia, one qt. high wines or whiskey; put together and dissolve. Apply to the wounds several times a day, and a cure will be effected speedily.

Warts on Cows' Teats.—Wash with alum water, or a strong decoction of black oak bark. Apply twice a day, after milking, for two or three weeks; this is an effectual remedy.

Inflamation or Swelled Udder in Cows.—Take equal parts, in weight, of hogs' lard, and the leaves of henbane, when in bloom. Cut very fine, and simmer together over a fire until crisp. Strain out with a smart pressure, so as to obtain all the substance from the leaves.

Cholic in Sheep.—Half ounce epsom salts, one dramch ginger, six drops essence of peppermint,—or a dose of linseed oil, or hogs' lard.

Certain Cure for a Rattlesnake Bite.—Take the yolk of a good egg, put it in a teacup, and stir in as much salt as will make it thick enough not to run off. Spread a plaster and apply it to the wound, and we will insure your life for a sixpence.

To Promote Health in Cattle.—Mix four to six parts of wood ashes, with one part of salt, and give to different kinds of stock, summer and winter. It is said to be good against bots in horses, murrin in cattle, and rot in sheep.

Ointment for Sores and Sprains.—Take a handful of wormwood, one of camomile, one of the root of Solomon's seal, and a half handful of English garlic. Stew them in oil till the herbs are cripsed. Then strain it off, and it is prepared for use. First wash the parts affected, and wipe them dry, and then apply the ointment.

To Stop the Ravages of Caterpillars.—Take a pan with lighted charcoal, and place it under the branches of the tree or bush. Throw a little brimstone on the coal; the vapor arising will be mortal to these insects, and destroy all on the tree.

Another to Cure Warts on Cows' Teats.—Neats foot oil, beef gall, spirits of turpentine, and old brandy; equal parts of each. Shake well before using. Apply it once a day.

Liniment for Sprains, &c.—Three oz. oil origanum, four oz. aqua ammonia, two oz. tincture of opium, one-half pint spirits of camphor, and alcohol enough to fill a quart bottle. To be well rubbed in when applied.

For Heaves in Horses.—Take smart weed, steep it in boiling water till the strength is all out; give one quart every day for eight or ten days. Or, mix it with beans or shoots. Give him green or cut up feed, wet up with water, during the operation—and it will cure.

Wounds in Horses.—Take one gill of turpentine, two gills of whiskey and one egg; beat the egg well, and mix the three together. It should be applied with a feather twice a day. It keeps the wound healthy, and prevents its healing too rapidly.

Effects of Pumpkin Seeds on Cattle.—Pumpkin seeds are said to act as a diuretic on cattle—augmenting the secretion of urine, and thus they decrease the lacteal secretion. Hence if an animal be fed on the same, a dimunition in the daily quantity of milk takes place.

The Stride of a Race Horse.—The celebrated animal painter, Herring, states that a race horse will clear from twenty to twenty-four feet at a bound, and from the impression left on the turf, he infers that a horse at full gallop places only one foot at a time upon the ground. This, he says, is more convincing to the ear than to the eye. In listening to a horse galloping on a hard road it will be found accurately exhibited by placing the little finger on a table or a pane of glass, and causing the other three fingers to follow in rotation; by so doing, the precise sound of that of a horse galloping will be produced. Then follows the bound, and again the one, two, three, four, in regular succession.

Wintering Colts.—When taken from the dam in fall, I consider the best food for them oat meal and sweet apples, about three pints of the former and four quarts of the latter, three times a day. They eat both readily. Don't know as it matters what kind of a rack they eat from, but it should be pretty well elevated—about as high as they naturally hold their heads. They should not stand on a *floor* at all; have a stable with earth foundation, and kept dry with straw, chaff, or leaves. Let them run out during pleasant days, or in fact a portion of every day. Continue the same feed through the winter, or two quarts of soaked oats three times a day in its place. Try this method and you will be pleased with the appearance of your colts in the spring. [A. B. C. in Moore's Rural New-Yorker.

Time has no patience, and no retraction.

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HORTICULTURE.

This department is considerably occupied with communications from correspondents, some of which we were compelled to lay over last month, for want of room; some of them will be perhaps a little late, but being good articles they will be better late than never.

We are sorry to find the former fears of extensive injury among the orchard trees, by the winter, so fully realized as seems to be the case. On all hands we hear one uniform complaint—that all the more tender fruit trees have been badly injured, or killed outright. The peach trees, even in Ohio, are killed by whole orchards. How they have fared in our more northern latitude is not doubtful. Cherries, especially the more delicate kinds, have fared little or no better among us. This bitter experience will fully confirm what we have long feared—that they would, at the best, be very unsafe in this region of the country. Then for the pears—where are the big prospective profits that we sometimes see figured up on paper, by Fancy Horticulturists and speculative Nursery men? Considerably reduced, to say the least, as such things are always likely to be, in the final proof.

The observations of Jeffries, which we copy from the Horticulturist, on this subject, are just to the point, in our way of thinking. Still, we would advise no one to be discouraged in their fruit growing efforts, from the experience of last winter; but simply to be instructed in their subsequent operations, so far as not to venture largely into those things that are not already well proved. On all doubtful ground venture carefully; and especially always receive every project with distrust that holds out the prospect of large profits, with little labor and pains. All such prospects are delusions, at least nine times in ten, and always will be, as much so as "perpetual motions." It is one of the unmistakable laws of nature, that everything costs about what it is worth. We say this much as pertinent, and bearing upon the notion latterly embraced by not a few of all professions, that great fortunes can be made out of Fruit, and Fruit Trees, growing in a short time, if we only order liberally of the Fancy Tree peddler, even though we set them out in the prairie grass, or bur oak openings, without fence, stakes, or mulching. This is all a delusion, and the sooner people get over it the better. We go in, heart and soul for an orchard on every farm, as early as possible; but trying to get it earlier will be likely to prove a failure. Therefore, don't buy any trees or shrubs that you are not fairly ready for. What you cannot do well this spring, let go over to the next.

We give outline illustrations of half a dozen more of the leading plums this month, including a fine cut of the McLaughlin, drawn by our friend Peffer—who, by the way, is well posted on the subject of plums, as well as on many other things. Those who do not get all the plums grafted that they wish, should bud the balance in July. We presume Mr. Peffer could furnish any who desire them, with buds of most of the choice varieties for a fair consideration, and what he does furnish can undoubtedly be relied upon.

It is well to give apple trees a thorough and early washing with strong soap suds or ley, especially if they have hitherto been infested with the *Aphides*, or green louse, or even the bark louse. The alkali will greatly benefit the trees in any event.

We gladly give place to the letter of our old friend H., of Windsor, Vt., and only wish he was a resident of the West, instead of the stale, superannuated East, where everything stands still, or goes a little backward.

BARK LICE.

For some time past we have been posting up our memorandums in relation to this little nuisance, the Bark Louse, and in the persuasion that we had the materials for an article on the subject that would be entirely satisfactory to our readers, was very complacently putting it together, when we had the pleasure of a call from Mr. A. G. Hanford. The conversation naturally enough turned upon the subject in hand, and knowing that Mr. H. had taken no little time and pains to investigate and ascertain the merits of the "Tar and Oil Remedy," and that he was not in the habit of jumping to a conclusion, the opportunity of profiting by his experience was gladly improved. The result of our questioning is given below. In common

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with many others who have not tried the tar and oil, we had some prejudices against its application; but the facts communicated by Mr. H. are, in our judgment, so conclusively in its favor that we have put them aside—with the "article" afore-mentioned. We have made the prescription as exact as possible, and we advise those who use it to "*stick to the text.*"

The Remedy—Common Tar and Raw Linseed oil.

The Proportions—Equal measures of the tar and oil. (If the tar be old, a larger proportion of oil is to be used: enough of the latter should be added to make the mixture—when merely warm—of the consistence of common varnish.)

The Mixture—Stir the ingredients over a moderate fire until they are thoroughly incorporated.

The Time to Use it—On some warm sunny day after the 1st of March, and *before* the swelling of the buds on the trees.

The Preparation of the Trees—Prune thoroughly by cutting away all the superfluous wood.

How to Apply It—A paint brush of medium size is the best implement. The remedy should be slightly warmed, and applied, as thinly as possible, to all parts of the tree, *except* that part of the wood of the preceeding year's growth on which no lice are found.

The Effect—With the first flow of the sap, the expansion of the bark will cause the varnish to crack; in the course of the season, it will peel away from the tree, carrying with it *all* the lice and the old scales, and leaving the bark clean, bright and healthy. *

This article is a little late, but probably not too late if the remedy is applied immediately. EDS. FAR.

CULTIVATION OF THE PEAR TREE

I hope Doctor Ward is going to do something clever; and more, that he means to let the world know it though the Horticulturist, as he progresses. It is now more than a dozen years since pear culture on the quince has been vigorously started in our country. Many a nurseryman has got rich out of them; and, by calling conventions and forming societies, they intend not to keep their lights under a bushel. Now, out of the millions of dwarf pears the nurserymen have sold, I would like to hear of the *very first* dwarf pear *orchard* that has paid expenses. Many tell of pears selling for sixpence, a shilling, even two shillings a piece, in the fruit-shops, and of a certain tree, or trees, in such one's garden, which annually yield their owners scores of dollars in their fruits. All this may be so. But, about the *orchards* of *such* trees! where are they? The pear has a Thousand, or less, enemies. The blight runs with a zigzag, forked, and sinuous course, through the orchard one year. The slug, and the curled and spotted leaf, like the leprosy, hit them in another. The pestilent field mouse girdles them at the roots in the third; and calamity, *in general*, is after them in the fourth. I have had a little experiance in this line myself, and the upshot of success in *extended* pear culture, either dwarf or standard, I receive with great allowance. I hope Doctor Ward will be successful, for if any man knows how to do the thing, *he* does. It is well that he is so close to Professor Mapes' superphosphates, and the poudrette factories; and if he gives his trees the very best of *garden* culture, manuring them like cabbages, trimming and cutting back to order, thinning out his fruit with scissors, and all that sort of thing, and don't loose them by disease or casuality, and then can get ten dollars a barrel for his pears, or sixpence a piece for them in market, he'll do. His article is interesting, and I hope he will continue the subject. [Horticulturist.

MINNEAPOLIS, Minn., Feb. 29., 56.

MESSRS. EDITORS—I wish to inquire the proper time for budding roses. I understand the method, but have forgotten the proper time. We have quite a number of very thrifty blackberry bushes growing in our garden, and I had thought of budding on them some of the native roses of the prairies.

All our fruit trees brought from Wisconsin have done well so far. Even our grape vines, without any protection, are occupying the frames they were fastened to in the summer. If they come out well next spring, we shall have no fears but that we can raise fruit in Minnesota. M.

We think our good friend M. will find it as difficult to cultivate Roses on Blackberries, as to gather Grapes from Thorns, or Figs from Thistles. July and August are the right months to bud in. We shall be happy to learn that she succeeds. EDS.

CONTENTMENT.—Socrates in going through the market-place said, "How many things are here that I do not want!"

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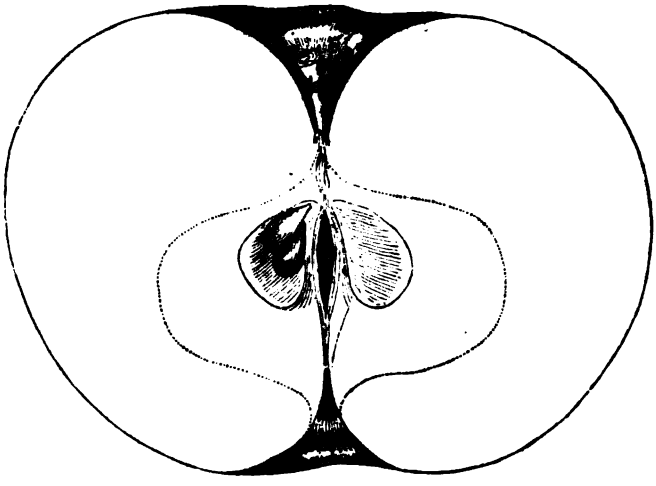

THE FALL WINE APPLE.

An apple of unmatched beauty and true excellence is the Wine Apple. The tree is hardy, a handsome grower, and a constant and abundant bearer. The fruit is exceedingly beautiful and tempting in appearance, which is a fit index to its character. For the desert during October and November, it has—shall I say *no equal?*

Awarding positively to any variety *the* superlative rank is a bold step, when a countless list of fruits are cultivated, and opinions so conflict as to their merits; yet in view of all this, the Wine Apple for the season named, must take the palm. *It has no equal.* Gainsay it who can by producing a successful rival.

This fruit is described by Elliott as the "Fall Wine Apple," and he asserts its non-identity with the Wine Apple of Delaware. This distinction, I think—from somewhat extended observation—is erroneous, and should not be followed, as tending to confusion.

Planters of fruit, write on your tablets the name of this unsurpassable variety, and have it well represented on your grounds!

DELAFIELD, Wis. A. C.

REMARKS.—From some specimens of fruit which accompanied the above, we have carefully made a drawing, and the description given on a preceding page. We do not agree with our correspondent in regarding the variety which is the subject of his article, as identical with the Wine Apple of Delaware. Notwithstanding some discrepancy between Elliott's description of the Fall Wine and the one we have given, and a very decided difference in his notice of the habit of the tree, and that given by Mr. C., we believe that both descriptions refer to the same variety. The apple is in its prime during the months of October and November, but the fruit now (Feb. 27,) before us is as fresh and fair as ever, and still retains much of its peculiar brisk vinous flavor.

Size, full medium. Form, round, flattened at both ends. Skin, very smooth and remarkably thin. Color, pale yellow almost entirely clouded over with shaded red, splashed and striped with crimson, dark crimson, on the sunny side, distinctly marked with not very numerous fawn colored specks. Stem, small, rarely rising above the cavity. Cavity, broad, smooth, nearly regular, variable in depth. Calyx, half closed. Basin, of moderate depth, slightly irregular, but well formed. Flesh, white with a trace of yellow—crisp, juicy, sub-acid, nearly sweet, with a peculiar brisk vinous flavor. Season, Oct. to Dec.; may be kept until March. Tree, a vigorous upright grower, and a great bearer. Soil, a stiff clayey loam. *

SPRING.

Now do the choir of chirping minstrels bring
In triumph to the world, the youthful spring.
The valleys, hills and woods, in rich array,
Welcome the coming of the long'd-for May.
Now all things smile. *Cowper.*

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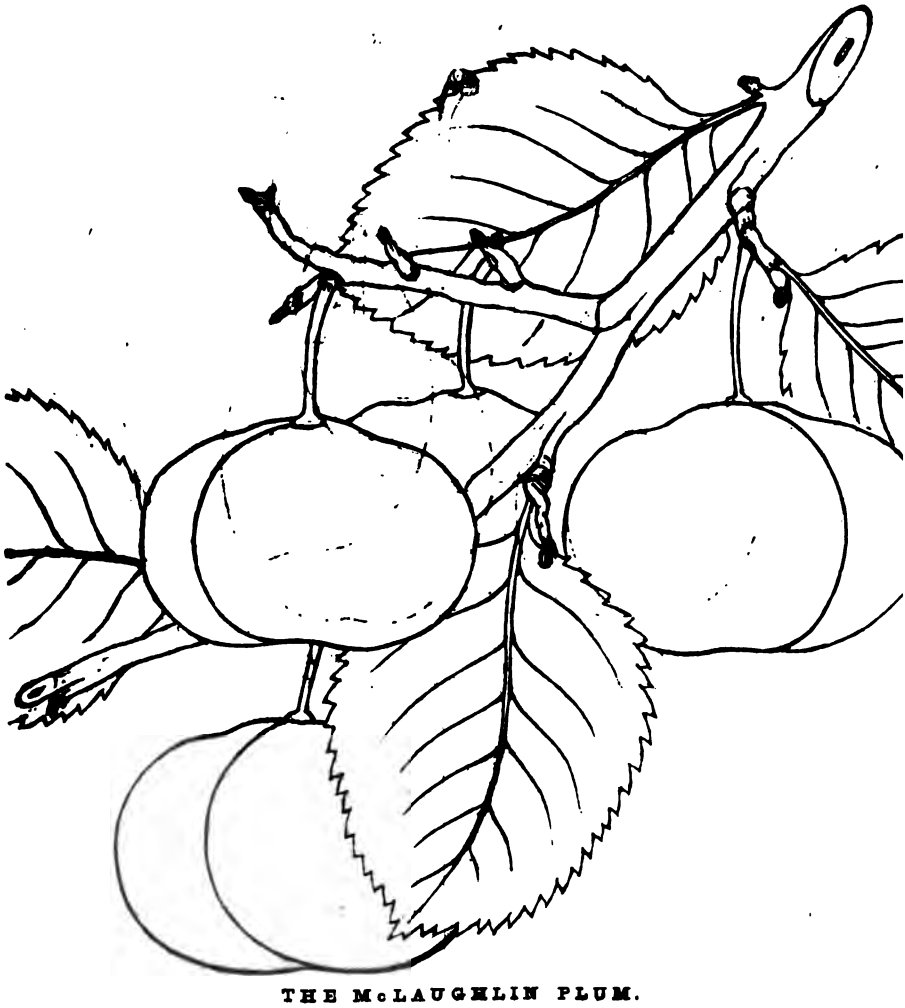

THE McLAUGHLIN PLUM.

MESSRS. EDITORS—I herewith send you a drawing of the Mc Laughlin Plum. As I have seen it recommended for general cultivation in the Transactions of the Wisconsin Fruit Grower's Association for the year 1855, but not described, I will therefore give the general outlines, and hope it will be to some advantage and benefit to your numerous readers, viz:

It is rather a large plum, roundish, oblate, much flattened at the ends, suture obscure, stock three-fourths of an inch long, scarcely sunk, skin thin and tender, russet yellow sprinkled with thin red, purplish at the base, flesh rather firm, juicy, sweet, luscious. Ripe, with us, about the 15th of September; growth, vigorous; leaves, large and glossy; shoots, smooth—somewhat resembling the Washington. Succeeds well on the wild plum stock, and is one of the hardy kinds for the West, as it withstands the winters well, and has proved with me a good bearer.

Also the Columbia is a very large and productive plum, and I have not as yet found them to rot on the trees, though they are somewhat rejected at the East on this account. While I have fruited them for three years, none have appeared to rot.

GEO. P. PEFFER.

PEWAUKEE, March, '56.

Bring flowers to crown the cup and lute—
Bring flowers—the bride is near;
Bring flowers to soothe the captive's cell,
Bring flowers to strew the bier!

Mrs. Hemans.

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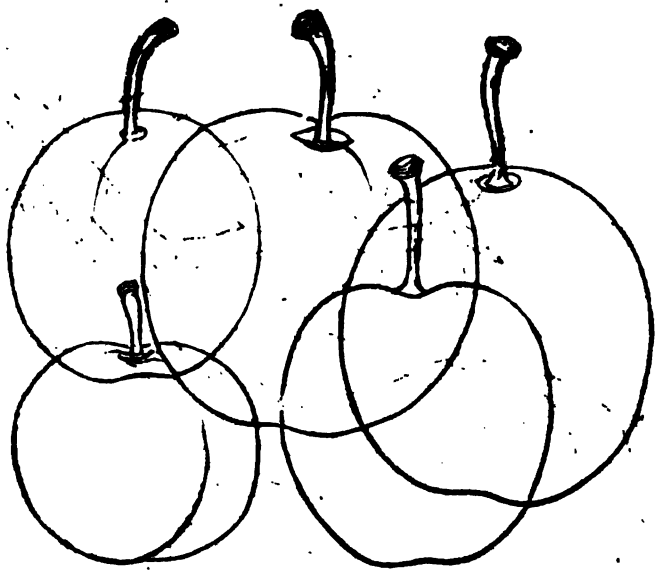
IMPERIAL OTTOMAN. WASHINGTON. JEFFERSON.



GREEN GAGE. IMPERIAL GAGE.

PLUMS—FIVE CHOICE VARIETIES.

THE WASHINGTON PLUM.

Perhaps no other variety of the cultivated plums makes so ornamental a tree as this fine American sort. Its symmetrical pyramidal form, with its large, glossy, crumpled foliage, unmistakably distinguishes this tree from all others, and entitles it to a prominent place in the garden, or the grounds about the house. It thrives admirably upon the Canada plum stock, (the wild plum of our woods and thickets,) provided it be worked at the surface, and transplanted so as to cover the point of union. I have three such trees now eight years transplanted, and ten years from the bud. They are nearly of a size—the largest eighteen feet high, and a picture of thrift and luxuriance. In favorable situations it is a productive variety, but unfor unately it is a bright mark for the curculio, who has proved himself its uncompromising foe. He appropriated my entire crop last season, which promised me bushels. On this account the Washington plum should not be planted on a sandy soil, or, I might say, on any other than a stubborn clay—not, at least, until the $10,000 Essay on the Curculio appears! I have many other varieties growing on a clayey soil, and have not on these seen the curculio's mark, and I doubt not the Washington would hold its fruit in a similar situation. This fruit is almost too well known to need a description. With me it is of the largest size—often six inches in circumference; skin, a clear yellow flesh, very sweet and firm. By some writers it is classed as "2d rate," but whoever likes a sweet and lucious plum will be content with the Washington. A. C.

DELAFIELD. Feb'y 1, 1856.

THE VANDERVERE.

As one of our unexceptionable winter apples, exceedingly beautiful and no less excellent. I have specimens of this variety before me, sound and in their prime, (Feb. 18,) and as beautiful as wax work. In a dry cellar they remain firm and excellent until the middle of March, and are fine for eating after the first of December. Tree, a good bearer and great grower, forming a spreading and rather open head. It will probably thrive on any Wisconsin soil that is *quite dry*. The outline of this fruit shows a rather conical figure, from which shape it varies somewhat —being more or less flattened. Fruit of medium size; on young trees not over-loaded, quite large. Stem, short, inserted in a deep, even cavity. Calyx, closed; basin,

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regular in form, broad, moderately deep. Color, bright red, striped and splashed with dark red on a clear yellow ground. The lines of red radiate with remarkable distinctness and regularity from the stem. Flesh, yellowish white, mild, juicy and excellent, slightly sub-acid—inclining to sweet.

THE STRAWBERRY.

The cultivation of this early and delicious fruit, so universally esteemed, is much neglected through the country at large. Failure from bad management has doubtless contributed to this neglect.

The requisites for success, are chiefly,

1. A good, deep, rich soil;
2. Clean cultivation between the rows;
3. A renewal by planting as often as once in three years.
4. Selection of suitable varieties.

Soil. Any deep, rich soil, which will afford fine crops of corn and potatoes, is well adapted to the cultivation of the strawberry. To be uniformly productive, it must be deeply trenched, either by the spade or double plowing, and well enriched with manure. Fine crops, it is true, may be obtained without trenching, but not in such excellence, profusion, nor certainty, in all seasons. It rarely, but sometimes happens that the soil is made too rich. The usual error is the reverse.

Clean Cultivation is a most essential requisite. On a large scale, it may be very cheaply accomplished by a horse and cultivator, the rows being about two feet apart, and the plants a foot to a foot and a half in the rows. The runners must be kept down by hoeing, or treated precisely as *weeds;* and unless the soil is already quite fertile, a dressing of manure should be applied each autumn, which will protect the roots, soak into the soil, and may be turned under in spring. A light top-dressing of leached ashes is highly beneficial to stawberry beds.

Some varieties, as the Large Early Scarlet and Dundee, will often bear profusely for a single season, even when the plants run thickly together; others, and more particularly the largest sorts, must be cleared of runners and kept well cultivated, or they will always bear poorly.

A renewal of the beds by transplanting, is performed most successfully in spring. The new plants, formed by the rooting of the runners, are always the best. Planting in summer requires much care and labor in watering; and autumn, the plants rarely become so well rooted as to withstand sufficiently the frosts of winter. In all cases, the roots, before set out, should be immersed in mud, and the plants watered afterwards.

[American Fruit Culturist.

STRAWBERRY plants, of desirable varieties, can be found in almost any neighborhood when beds need thinning out; they can be had as a gift. In all such cases, it pays for every one, who has the time and taste, to try their hands at getting up a bed; a little pains is often rewarded in the most satisfactory manner.

We did intend to furnish an elaborate article on the culture of strawberries for the April number, but being disappointed in getting the requisite cuts to fully illustrate it, we thought it advisable to let it go over till summer. It will probably appear in season for fall planting. It is a subject well worth the attention of all, as it is a fruit that comes early and abundantly into bearing, and is not liable to injury from the winter. We shall say more about it hereafter.

WINDSOR, Vt., March 26, 1856.

DEAR FRIEND POWERS—Though not an agriculturist, the ennobling avocation of the nurseryman often arrests my attention, and I as often find myself longing to enter into his work. I have long believed that the phenomena of nature, carefully observed, would oftener make the efforts and the success of nurserymen commensurate. Observations in your young and attractive State, in September last, have only confirmed me in my belief. The Wisconsin FARMER, I am sure, will, ere long, dispel all the mist that enshrouds this very useful department of agriculture, and to this end suffer me to make a few suggestions through its pages. I noticed in several places in your State, that very exposed sites had been chosen for apple orchards. This is all wrong; for, exposed to winds as much of your State truly is, there are plenty of beautiful seclusions for all such purposes. Place in your orchard a number of bearing apple trees, and an experienced eye will tell you what was the degree of their exposure, about as sure as though they were never uprooted. If the tree be poplar shaped, it denotes exposure, and I would as soon think to gather "grapes of thorns," as to find many apples on such a tree. Again, if the limbs join the parent stock with a great degree of strength of timber, it denotes deleterious exposure. But the most apparent evil presents itself in the fruit. You cannot have failed to notice

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some apple trees, vigorous in growth, the fruit of which is found cleaving to the lesser limbs near the trunk, and consequently in the shady part of the tree. Now if your attention has been called to the fact, you will have noticed that the position of the tree was such that the rude winds would not suffer the blushing fruit to mature, (where the best fruit always does mature,) on the outer limbs. All these appearances I noticed in your vicinity, but the opposite was most beautifully presented in some places not many miles from Galena, Ill., though in Lafayette Co., Wis., vigorous trees, large fruit, and good bearers, the result of judicious selections for planting the orchards, were observed in abundance. A well protected tree will oftener present such a display of fruit that the foliage will almost be obscured, while the opposite phenomena is sure to present itself in an exposed place. An apple tree, of the Spitzenburg variety, in the garden I occupy, bore the last season twenty-eight bushels of assorted apples, and the trunk of the tree is only thirteen inches in diameter. You may be sure there was less foliage than fruit to be seen in September. The Black Earth valley, in Dane Co., presents some of the finest places for fruit growing that I ever beheld. Here again Nature makes her own suggestions. I could hardly persuade myself that the cultivating hand of the nurseryman had not been there. Those beautiful slopes between the bluffs that head out to the valley, with their stately oaks at regular intervals, all growing less in size as you ascend the bluff, are constantly making such suggestions as will soon be heeded by the thrifty husbandman. I saw nice fruits at the Rock County fair, such as might dispel all doubts, if any existed, as to the adaptation of soil or climate. Care and protection from animals are requisite to the success of the young fruit tree, and you will pardon me if I mention the hog. He has great liberties in the west, but is not generally appreciated here as a nurseryman. He may figure among the windfalls in a later period of your fruit history, but I detest his snout as an agricultural implement altogether. Much difference of opinion exists as to the setting of young trees, but I never found a better way than to sink the hole in proportion to the root, place the tree, put on a little of the earth, pour in a sufficient quantity of water to make a thin mortar, and lift the tree gently up and down until the root is fairly imbeded; then fill up and carefully press the soil around the tree, leaving it tunnel-shaped, or concave. The ground should often be made light about the tree by the hoe or otherwise, and at least once in a season thoroughly manured. All this is known to every one, but knowing it will not suffice if it is not done. God has been bountiful in providing places, and recreant to your trust and your posterity will you prove, if ten years more shall find no "blushing fruit" intermixed with the golden grain that everywhere greets the eye in its season. Plant the trees, nurse them, fence them if need be, prune and otherwise care for them, and in due time, eat of the fruit. You will grow wiser in the employment—confer a blessing on posterity—while they in turn will "rise up and call you blessed." Geo. P. Hayes.

For the Farmer.

OSAGE ORANGE.

Messrs. Editors—Since I have been a resident of Wisconsin, owing to the scarcity of timber in many parts of the State, I have taken a lively interest in everything pertaining to the subject of fencing, and when you, a few months since, appealed to the farmers of Wisconsin for their experience in raising Osage Orange hedges, I expected to have seen several communications before this, and felt assured that I should be benefitted and profited by the experience of my brother farmers on this subject. I have closely watched each number of the Farmer ever since for information, but in vain; and when you made your second appeal to the farmers for "facts instead of theories," it occurred to me that perhaps the reason of their silence on this subject was that no Osage Orange hedge had as yet been brought to maturity in this State. I confess for one that I am but a mere novice in the business, but as far as my experience goes, I cheerfully submit it to the numerous readers of the Farmer, trusting that others will do the same.

In the spring of '53, I planted sufficient Osage Orange seed in my nursery to grow a hedge of about 70 or 80 rods. I soaked the seed in warm water 24 hours previous to planting. I judged they nearly all germin-

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ated, and by autumn they had grown about 20 inches, and some over 2 ft. Just before winter set in, I took up about two-thirds of them and carried them into my cellar, and slightly buried the roots. The one-third left in the nursery, I divided into three equal parts. I dug a trench sufficiently deep to take in the roots and about one-third of the body; in this trench I deposited one portion of the remainder and covered with earth, leaving the tops out of the ground. I bent down another portion, and covered the whole with straw; then shoveled on about four inches of earth. The other portion I left standing as they grew in the nursery. In the spring of '54, on examining my thorn bushes, I found that those which I had left exposed in the nursery were nearly all dead. Of those that were bent down and covered, many were moulded and spoiled. Those in the trench were in a much better condition; a very few only were injured. Those in my cellar were in a perfect state of preservation. As soon as the weather would permit, I selected those I thought would grow, and after cutting off the tops so as to leave them standing about 8 or 10 inches above the ground, set out, at the distance of 10 inches apart, about 50 rods on the south and west sides of my orchard. At the same time I set about 20 rods upon the top of a sod fence. The season, however, proved too dry for the latter, and the winter entirely killed out the few puny shrubs that stood the drouth of the summer. The ones around my orchard thrive remarkably well, considering they were much neglected, and also shaded by a board and rail fence. They grew about three feet this season. In the spring of '55, I cut them down till within ten or twelve inches of the ground. This season they were nearly or quite overrun with weeds, yet they attained a growth of from three and one-half to six feet. I think they are all alive this spring, and with proper care can see no reason why they will not make a substantial and permanent fence.

Very respectfully yours, C. B. HAWES.
EAST RANDOLPH, April 16, 1856.

THE mind of a great and good man lives and breathes through the world, long after merely physical existence is extinct. This is the aroma of the soul, that like the fragrance of the rose, embalms its memory, and pours forth holy incense upon the altar of Death.

SHARON, WALWORTH CO., WIS.
March 31, 1855.

MESSRS. EDITORS—At the risk of being considered obtrusive, I wish to express to you the satisfaction I derive from the perusal of your valuable journal, whenever it makes its appearance, and to compliment you upon its neat appearance, well timed suggestions, and other valuable articles. In wishing you all possible success, I trust to see the FARMER in the hands of all cultivators of the soil, who as a class have too long neglected to support an agricultural paper in our own State, or at any rate have derived little benefit from the perusal of pages devoted to the great interests of our State, and who are too prone to pore over the political sheets of the day.

The way you admonish the lazy and indifferent in your monthly Editorial Suggestions has particularly pleased me, and I hope you will let no chance slip by to continue your judicious remarks. What we want is, that the press shall speak the truth with trumpet tones through the length and breadth of the land, and rouse the farming community to a full sense of its responsibilities and importance.

For the edification of some of your readers, permit me to relate to you in as few words as possible, what I saw a short time ago at the house of a farmer of this town, and I hope that it may be the means of correcting the abuse of that, which to many old persons is a great comfort. In conversation with the old gray haired man, the head of a numerous family, I noticed a young and rather pretty girl approaching the stove, holding something, of a dingy, yellowish black color in her slender fingers, which, on her lighting it, proved to be, as I thought, her Papa's pipe, and I thought, "What an attentive daughter the old man possesses!" Judge then of my surprise, when, with all the gravity of a veteran, she sat down opposite me and coolly inserted the disgusting old stump between her lips. Think of that, young poets, when you write of nectar and ambrosia, ruby lips and honied breath! Could she have been aware of the impression I received, and the thoughts it suggested—it might have cured her of the evil habit.

Although we have made considerable progress in civilization, and it is not more than

fifteen years ago that ladies could hardly enter a railroad car without soiling their robes in tobacco juice, and men seemed to consider cushioned seats as resting places for their boot heels, it seems there is yet room for improvement. Look in, for example, at one of our country stores. There is quite a motley crowd, seated for want of chairs or benches, in long rows upon the counters on each side; men and boys, young and old—yes, some are even lying at full length upon them, using the factory goods for pillows. How few of these idlers do you think, will get up and make room for a customer, and what lady likes to trade at a place crowded with men, chewing and smoking tobacco?

Farmers should not permit their sons to lounge away their time thus, and they are themselves partly to blame. At the present age of cheap publications every well to do farmer ought to have a small but well selected library of good books, for the mental improvement of his children. In fact, he *ought* to do everything in his power to make home attractive to them. If he does this, the boys will stay at home, and thus avoid many opportunities for temptation.

I have run this longer than I intended, but I hope you will take up the subject in a future number, and keep it before the people, as your pen is more competent than mine to do it justice. I remain, Gentlemen,

Yours, A. H. KUMMEL.

ADULTERATION.

The Dublin Medical Press, referring to the Parlimentary committee to investigate the adulteration of food and medicines, says:—"One manufacturer produces twenty-one tons of rhubarb per annum. It is inferior to the Turkey rhubarb, as fetching 4p per pound, while Turkey is 11s. 6p. Cod liver oil is immensely adulterated; only five per cent. of genuine cod liver oil will answer all the chemical tests. Mustard has thirty per cent. of lime or chalk as adulteration. Chloroform undergoes decomposition, but it is not much adulterated; quinine is very much adulterated with starch and manna.

ALUMINUM.

French chemists are devoting themselves with energy, to discover if possible. cheap and improved processes for obtaining the above named valuable metal. We hope their efforts will soon be crowned with complete success.

DANE COUNTY AGRICULTURAL SOCIETY.

At a meeting of the citizens of Dane County, held pursuant to notice at the Agricultural Rooms, Madison, March 29th, Wm. A. White was appointed Chairman and D. J. Powers, Secretary. After some discussion the convention adjourned to meet again on Saturday, April 5th, 2 P. M.

D. J. POWERS, See'y *pro tem.*

SATURDAY, April 5, 1856.

The Convention met according to adjournment, Wm. A. White presiding. The Committee to report a Constitution for the County Agricultural Society submitted a draft which was adopted.* When the Society proceeded to an election of officers as follows:

P. W. MATTS was elected President.
WM. A. WHITE, }
T. T. WHITTLESEY, } Vice Presidents.
N. P. SPAULDING, }
D. J. POWERS, Corresponding Sec'y.
H. F. BOND, Recording Secretary.
Dr. WM. H. FOX, Treasurer.

GENERAL COMMITTEE.

J. H. B. Matts,	Verona.
Gabriel Bijornson,	Perry.
B. R. Colvin,	Madison.
J. A. Paine,	Fitchburg.
W. R. Taylor,	Cottage Grove.
J. Heistand,	Bloom'g Grove.
S. L. Sheldon,	Burke.
Judge Dow,	Christiana.
Adin Burdick,	Albion.
H. H. Giles,	Dunkirk.
S. W. Graves,	Rutland.
R. P. Maine,	Oregon.
Varnum Parkhurst,	Montrose.
Joel Britz,	Primrose.
Ebenezer Brigham,	Blue Mounds.
J. P. McPherson,	Springdale.
John Gammon,	Middleton.
Wm. Showers,	Cross Plains.
	Hobart.
Wm. Powell,	Black Earth.
J. W. Ford,	Berry.
Abram Smith,	Springfield.
Warren,	Roxbury.
G. Martin,	Dane,
Ole Johnson,	Vienna.
John Collings,	Westport.
Elias Combs,	Windsor.
Wm. H. Clark,	Bristol.
A. Huntington,	York.
Cha's Lum,	Medina.
Major Anderson,	Sun Prairie.
Wm. M. Colladay,	Dunn.
A. E. Adsit,	Deerfield.
J. W. Sharp,	Pleas't Springs

H. F. BOND, Secretary.

*See Constitution adopted by the Society, on page 204.

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FATHERNAL DUTY.

The father who plunges into business so deeply that he has no leisure for domestic duties and pleasures, and whose only intercourse with his children consists in a brief word of authority, or a surly lamentation over their intolerable expensiveness, is equally to be pitied and to be blamed. What right has he to devote to other pursuits the time which God has alloted to his children? Nor is it any excuse to say that he cannot support his family in present style of living without this effort. I ask, by what right can his family demand to live in a manner which requires him to neglect his most solemn and important duties? Nor is it an excuse to say that he wishes to leave them a competence. Is he under obligation to leave them that competenc which *he* desires? Is it an advantage to them to be relieved from the necessity of labor? Besides, is money the only desirable bequest that a father can leave to his children? Surely well cultivated intellects, hearts sensible to domestic affection; the love of parents, and brethren, and sisters; a taste for home pleasures; habits of order, regularity, and industry; a hatred of vice and vicious men; and a lively sensibility to the excellence of virtue—are as valuable a legacy as an inheritance of property—simple property purchased by the loss of every habit which could render that property a blessing. [Wayland.

TREATMENT OF SCARLET FEVER.

As the scarlet fever is very prevalent at present, it may be of great benefit to many to publish two simple methods of treatment for the disease, in its earlier stages. The one is to rub the entire body of the sick with soft lubricating substance—a piece of fat pork has been used for this purpose. It is stated that it softens the skin, opens its pores, and produces a soothing influence on the patient.

The other plan is to dissolve some saleratus in warm water, (about one-fourth of an ounce to the quart,) and bathe the patient's body with this at a milk heat. A soft sponge is employed in bathing the body, and a soft towel used for drying. This operation should be done rapidly in comfortably warm apartment, and the patient placed in bed as soon as possible afterwards.

The alkaline solution, it is stated, removes scurf from the skin, and softens it, and promotes perspiration. Both methods, to our knowledge, have been tried with good results; but we do not present them as substitutes for any method of treatment practiced by physicians. The throat affection—the most dangerous connected with this disease —must be treated locally for itself.

[Scientific American.

AGRICULTURAL MEETING.

Pursuant to notice, the following county commitees assembled at the Greenwood House, in River Falls, on Saturday the 22d ult., at 10 o'clock A. M., to confer on the subject of forming an agricultural society, and transacting other business entrusted to their charge:

St. Croix—P. D. Aldrich, James Walstow, of Hudson; W. A. Tozer, W. L. Perrin, of Kinnickinnie.

Pierce—Smith R. Gunn, of Clifton Mills; S. M. Davis, of River Falls; Oliver Gibbs, Jr., of Prescott.

W. A. Tozer was chosen Chairman, and O. Gibbs, Jr., Secretary.

On motion of S. R. Gunn the following resolution was adopted:

RESOLVED, That the best interests of St. Croix and Pierce counties require that the people of both should unite in forming and sustaining an agricultural society.

On motion of O. Gibbs, Jr., it was

RESOLVED, That the citizens of St. Croix and Pierce counties, be requested to assemble in mass convention, at River Falls, on Monday the 14th day of April next, at 10 o'clock A. M., for the purpose of forming a union agricultural society.

A draft of a constitution was then presented by Mr. Aldrich, amended slightly, and adopted for reference to the mass meeting.

WINDS OF THE NORTHERN HEMISPHERE.

Professor Coffin, of Lafayette College, Pennsylvania, in an elaborate scientific paper, says that there exists in the Northern Hemisphere three great zones of wind, extending entirely around the earth, modified, and, in some cases, partially interrupted by the configuration and character of the surface.

The first of these is the trade wind, near the equator, blowing, when uninterrupted, from northeast to southwest, this belt is interrupted, however, in the Atlantic Ocean near the coast of Africa, upon the Mediterranean sea, and also in Barbary by the actions of the Great Desert. The second is a belt of westerly wind nearly 200 miles in breadth, between latitude 35 and 60 degrees North, and encircling the earth, the westerly direction being clearly defined in the middle of the belt, but gradually disappearing as we approach the limits on either side. North of this there is another system of winds blowing southwardly, from high northern latitudes, and gradually inclining towards the West as it moves into a latitude of greater eastern velocity.

The shortest and surest way to live with honor in the world, is to be in reality what we would appear to be.

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OUR FARMER GIRLS.

BY IRA LOUIS LITTLE.

Some may talk of girls in the circles gay
Where the gleaming lights on their jewels play;
But give me the form of the farmer girls,
As the breezes sweep through their soft rich curls,
While over the meadows they trip along,
And cheerily warble their morning song.

No midnight revels have invaded their cheek,
Nor circled their eyes with a sable streak,
But their forms erect in their beauty and health,
And dearer by far than the rich one's wealth;
Then seek the love of the farmer girl,
And wearily treasure the priceless pearl.

No fancies engendered by wild romance,
Will steal from her eye its truthful glance,
Still forever the same as years roll by,
And storm-cloud and tempest shall darken your sky—
Still forever the same all loving and true,
She'll loyally cling, unchanging to you.

Then a hearty toast to our Farmer's Fair,
As they blithely dance in the evening air;
O, their thoughts are all pure as the zephyr that floats
Away with its burden of laughter notes;
Then drink their health in the gleaming gray,
And merily list to the bird-like lay.

THEORY AND PRACTICE IN MECHANICS.

W. J. Macquorn Rankine, C. E., on his recent appointment to the chair of Civil Engineers and Mechanics, in the University of Glasgow, chose the above subject for his introductory lecture.

He commenced by showing that in geometry, in rhetoric, and in the fine arts, the Greeks are our masters; but that in physics and mechanics their notions were pervaded by a great fallacy—a double system of natural laws; and that this fallacy of a supposed discordance between rational and practical, celestial and terrestial machines, continued in force, and appears to have gathered strength, and to have attained its full vigor during the middle ages. In the 15th, 16th and 17th centuries, the system falsely termed Aristotelian was overthrown, and the truth began to be duly appreciated, that sound theory in physical science consists simply of facts, and the deduction of common sence from them, reduced to a systematic form. The science of motion was founded by Galileo, and perfected by Newton; and it was established that celestial and terrestrial machines are branches of one science, that they depend on one and the same system of clear and simple first principles; that those very laws which regulate the motions and stability of bodies on earth, govern also the revolutions of the stars, and extend their dominions throughout immensity of space. He then proceeded to show the evils which arise from ingenious and practical men not being acquainted with scientific principles, and how often time and money are expended in visionary inventions, particularly perpetual motion. The harmony between theory and practice confers another important benefit, that of raising the character of the mechanical arts, and those who practice them.

FOR WASHING DAY.

The following Washing Preparation is copied by the Ohio Cultivator from the American Agriculturist. It is cheap, simple, and *we have tried it*, and can recommend it to our prairie sisters, as a great help in the *rubbing* department of washing:

To each pound of common hard soap, add 1-2 to 3-4 oz. common borax, pulverized, and 1 qt. water. Put the water into a tin pan or other convenient vessel, and place on the stove; put in the borax, and then add the soap, cut in small thin pieces. Keep them hot, but not boiling, several hours, or until the soap is dissolved. When cool, it will be double the quantity, and thus save at least one half. Rub the dirtiest parts of the clothes with this compound, and soak them over night, if convenient, or an hour or two in the morning. This mixture does not cut the hands, and is adapted to all sorts of clothes—calicoes, flannels, &c., as well as white cotton or linen. They are to be washed, boiled and rinsed, as usual, but the labor of *rubbing* is greatly lessened.

HILDRED THE HOUSEWIFE.

PRACTICAL EDUCATION.

The intelligent educator of youth will consider the mere acquisition of information by his pupils as a secondary thing. The training of the intellectual faculties is best secured by the pure exercise of mind. A comprehensiveness of grasp, a clearness of perception, a power of command of language, and readiness in expression, are qualities the most valuable in men. A teacher's greatest exertions, therefore, should be directed to developing and fostering them in children. A man may possess much information, and yet be wanting in the power of concisely and comprehensively answering a question, of seizing on the cardinal points of a subject, and may lack all delicacy of taste and discernment. The end of education is to refine and elevate—to train the whole man. No one faculty should be unduly worked and loaded, but all the mental powers must work together, one bringing another into exercise, as wheel acts upon wheel in a piece of well ordered machinery. [Ottawa Citizen.

A man who tells nothing, or who tells all, will equally have nothing told him.

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For the Farmer.

ARTESIAN WELLS.

MESSRS. EDITORS—I see that J. B. CARLE, of Janesville, makes enquiries for information about artesian wells, in your April number. I am not a master of the science, but will give you what I know on the subject. At San Francisco and San Jose, Cal., they succeed well. At the former place, 100 feet give a supply of water; at the latter, from 200 to 800 ft. depth is necessary. Both these places have mountains several thousand feet high within five miles of them.

I was at Stockton, Cal., in 1850, while a company bored 500 feet without any prospects of success and gave up the job. There are not any hills within forty miles of Stockton. The geological formation of the valley is the same as that of San Jose.

And now comes the long disputed question, "Are artesian wells governed by the common principles of hydraulics only, or are they governed by some internal or external pressure of the earth, similar to volcanoes?" My opinion is that both are right. That is, you may get an artesian well in one place upon the common principles of hydraulics, and in another from volcanic action. I understand that they succeed well at Fond du Lac, and that there is one at or near Waukesha; also one at Elgin, Ill.

Mr. Hoar, of this town, superintended the drilling of a well in Chicago, for the G. & C. U. R. R. Co. He went 500 feet, and gave it up. The only water he struck was at 160 feet, which rose within one foot of the surface. Mr. Wm. Hoar of Clinton, Wisconsin, has the necessary tools and experience for going any depth. The cost cannot be estimated before the work is done; as it will vary from the mere cost of tubing to many dollars per foot, according to the material to be pierced. Mr. Hoar charges for drilling a four inch hole in limestone rock $1,50 per foot, and for a six inch hole, $3,00—that is, if the well is not more than 100 feet deep.

Our Railroad Companies could better afford to risk the experiment than any private individual. Some of our cities might undertake a well for the benefit of the city. Or I will go into a joint stock company, and in case of success, let the benefitted parties refund a portion of the money. JOHN TINKER.

CLINTON, Wis., April 26, '56.

NEW ROPE MCHINE.—A rope machine, an interesting and curious specimen of mechanism, has recently been patented. This apparatus condences the long old fashioned rope-walk into a space of five feet square, makes ropes of every kind and variety, from bed-cords to man-of-war cables. One of these machines, attended by a boy, turns out, it is said, the ordinary inch Manilla rope of commerce at the rate of some thousands of feet per diem, accomplishing the labor of seven or eight operatives. The quality of the article produced is superior to the hand-made, since the tension of each thread and strand is more even.

INVENTION OF BOOTS AND SHOES.—Boots are said to have been invented by the Carrans. They were at first made of leather, afterwards of brass and iron, and were proof against both cut and thrust. It was from this that Homer called the Greeks brazen-footed. Formerly, in France, a great foot was much esteemed, and the length of the shoe in the fourteenth century was a mark of distinction, The shoes of a prince were two-and-a-half feet long, those of a baron two feet and those of a knight eighteen inches.

TRUE HAPPINESS is found, and sensible philosophy displayed, in making one's home comfortable, and in providing what will gratify our own tastes and satisfy our own wishes, irrespective of any desire to impress those around us with false ideas of our munificence in expenditure or of our capacity for display. To do or to desire more than this is not merely foolish, but is criminal; and the history of our country will show that our prosperity as a nation depends upon our observance of propriety in our personal expenditures. [Louisville Com. Review.

There at Pittsburgh an establishment called the "Eagle Steel Works," manufacturing cast steel of all varieties, bar, shear, and sheet. They have three converting furnaces, five heating furnaces, and eighteen melting furnaces. They employ about sixty hands, many of them imported from England, and consume annually seven hundred and fifty tons of iron, one-third of which is Swedish. The steel produced by these works has been repeatedly tested, and is found fully equal to the best English imported.

MR. MILLET, inspector of forests, who has greatly distinguished himself by his experiments in the artificial breeding of fish in France, has caused several millions of gold fish to be hatched in the Seine at Choisy-le-Roi.

The wealth of mind and heart, of faith and love no change can take from us.

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EDITOR'S TABLE.

To Correspondents.—Perhaps among our numerous correspondents, there may be those who will think they have to wait unreasonably long for answers to their various enquiries and communications. The only apology that we can offer is, that we are usually pretty full of business, and all matters not of a very especially pressing nature have to lie until we can get to them. We cannot afford to keep many clerks to attend to outside, accidental business, although we are glad to do everything we can to oblige our friends, as fast as we can do it.

The uninitiated may suppose the matter of getting up a monthly agricultural paper not much but a pastime, but we think six months' experience would learn them the contrary.

We hope our numerous occasional correspondents will continue to write for the Farmer with unabated vigor, even though their communications do not always appear in the next succeeding number. It sometimes so happens that we have more material than we have room for. In that case we have to let such lie over as will keep best. All articles of importance will appear as early as possible. Such articles as are intended for the current month should always be in by the 10th of the month to be in season, and earlier if practicable—especially as we intend hereafter to be a little ahead of time if possible.

Nothing suits us better than to receive communications direct from our sterling, practical, experienced farmers. Three-fourths of all articles written are mere theories, or opinions of somebody, instead of actual facts, and experimental observations, which is really the only kind of much value for publication, Yes, we say, give us facts, even if the language or style is not so especially fine, That part we can attend to if necessary.

One great object of the Farmer is to interchange the ideas and knowledge of its different readers. One man often finds out, or knows a fact, that would be worth thousands to the balance of community if they knew it as well. The Farmer is the proper vehicle for communicating such knowledge.

Patent Office Seeds.

Except a few packages of Spanish Spring Wheat and English Early Peas, have not yet arrived, much to our regret, as it is getting so late in the season. We have written the most urgent letters in relation to them, but as yet have nothing satisfactory in return.

What have come we have distributed to the best of our ability, and shall do the same with any that may arrive hereafter.

Those well-paid government officials seem to prove rather slow coaches in everything they undertake to do.

The Columbus Republican—

Is one of the best weekly family papers in the State. Its enterprising and liberal minded publishers, Messrs. Malo and Thayer, show good taste in getting up their paper, and always contrive to have something in it that interests all members of the family, from blooming youth to hoary age. We understand it has a good subscription list, which is rapidly increasing. It is as it should be. Friend Thayer is an unfortunate, but worthy man.

Wisconsin a Prosperous State.—

There is probably no surer indication to the traveler of the prosperous growth of any section of country, than the success which attends the labors of its principal business men, and the steady increase in the demand for staple articles of merchandize. A person visiting our commercial metropolis, Milwaukee, from time to time, is struck with the rapid and steady increase in the size and number of its mercantile and manufacturing houses. The greatest earnest that can be given to a visitor to our State, of its rapid growth and development, short of a tour through the rural districts, is to take him to Nazro's establishment, at No. 123, East Water St. When Wisconsin was new, Henry J. Nazro and brother opened a medium sized hardware store in Milwaukee. By fair dealing and judicious advertising they called together customers from every portion of the State. As the State increased in population their business has increased in magnitude, until it is second to none in the West. They have, during the two past seasons, built a block of stores unsurpassed by any establishment west of New York—a correct likeness of which will be found on the last page of the cover. The four stories and basement of this mammoth building are filled with every thing in the hardware line, from a cambric needle to a crowbar, from a fish-hook to an anchor, mill saws, agricultural implements, or any thing else in their line that can be found in an American or European market. We say, success to this and all similar establishments. They help to make Wisconsin what she is rapidly becoming—the Empire State.

Dane County Agricultural Society.—

The official organization of this Society will be found in this number, and we think it will be such as will commend itself to the farmers and business men of the county. Its officers are mainly from the thorough, practical working men, and hence we may expect to see a lively interest taken in its affairs. We see no reason why Dane County should not have the best Society, and the finest Fairs in the State. Such a state of things would benefit the County more than any other one thing.

An Extensive New Jewely Store.—

Loomis & Hoes have recently opened a first class Jewelry Store, in Martin's Block, southwest corner of East Water and Wisconsin Streets, Milwaukee. Their signs, on entering the business portion of Milwaukee from the west, are the first to attract the eye, and all in want of Jewelry, Clocks, or anything else in their line, cannot fail to profit by dropping in, as their stock is complete, and they are reliable men to deal with. See their card on another page.

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The Farmer for Premiums.—

The following is certainly a very liberal offer, and ought to prompt every enterprising neighborhood, within the proper circuit of the Times, to send in large lists. They are safe in doing so in any event, as the Times is extremely well worth the cost to any one, and if perchance they also get a copy of the FARMER in the bargain, it certainly is a first rate investment. We hope the patrons of the EVERGREEN CITY TIMES will appreciate the liberality of its publishers, and show that appreciation by sending them in prompt and large lists of subscribers. No money is better invested than for a good, thorough news or agricultural paper.

We would suggest to all such as fail to get the FARMER as a premium, to send to us direct for it, and it will be promptly forwarded at our lowest prices.

We hope all the other papers in the State that wish to increase their circulation, will follow the pattern set by the Times. We will warrant it to do us all good, beyond peradventure.

"PREMIUMS! PREMIUMS!—The perusal of the WISCONSIN FARMER for March—which, by the way, has been some two weeks on our table—and its increasing excellence, palpably superior to that of any other agricultural periodical of the West of which we have any knowledge, has excited in us a desire to assist in extending its circulation among the farmers of the county, and at the same time to increase our own circulation. To this end we propose to offer the FARMER—the subscription price of which is ONE DOLLAR, and richly worth it—as a premium for the competition of new subscribers, as follows:

"To the largest list of new subscribers to the 'Evergreen City Times,' to be served at any one post office in or out of this county, which may be procured between this date and the first day of July next, and forwarded to us with the money, at $1,50 each, we will furnish as many copies of the Wisconsin FARMER for the year 1856!—thus giving to each member of said list a PREMIUM OF ONE DOLLAR!!

"We venture the assertion that the above is the most liberal offer ever made by any publisher of a local paper, but we make it in good faith, with the intention of religiously fulfiilling on our part, be the number of said largest list five or five hundred. Therefore let those who wish the FARMER one year "free gratis, for nothing," begin at once to make up their lists, as the third volume of the Times has just commenced, and now is the best time to subscribe.

"All subscriptions sent in with the view of competing for the above premium, must be so stated, in order that we may keep a separate record of the same, and must be accompanied with the cash at our regular subscription price.

"A 'free fight' then for the Premiums! How many are in?

"SHEBOYGAN, April 5, 1856."

Large Eggs—"It Takes Wisconsin."—

While at Mukwonago, in Waukesha Co., a short time since, we were informed by a farmer whose veracity we were assured could be relied on, that he had a hen's egg that measured eight inches in circumference one way, and six the other. We thoght when we returned home we would publish that story; but we found going the rounds of the papers stories that so far eclipsed it, that we concluded our informant would hardly wish his name given. Below we copy two extracts as specimens:

"SHANGHAI VICTORY.—Last week a man brought into our office a monster shanghai egg-shell, which he said was sent us by Mr. Rich, the Postmaster at Dell Prairie. It measured 7 1-8 inches in circumference one way, and 10 3-8 the other! But this is not the largest part of the story:—The man who brought it, also brought another, common sized egg, which with another nearly as large, he says, Mr. Rich informed him was found in the largest egg on breaking it!!! The smallest egg, he says, had a very thin shell, and was broken in taking it out; but the middling sized egg is sound, and has the appearance of an ordinary hen's egg. Were it not "All Fools Day," we should be unwilling to vouch for the truth of the last part of this story; but we give our authority. But in regard to the size of the large shell, we speak from knowledge; and we are sure it cannot be a goose egg, for it was laid the same day that Barstow resigned his office, which, (lay such an egg at such a time,) nothing but a Shanghai would do."

[Wisconsin Mirror.

"LARGE EGGS—WHO CAN BEAT THEM?—Col. D. W. Jones left with us, a few days since, three hen's eggs, each of which measures fully 7 1-2 by 6 1-2 inches round. They are not a select trio, but only a specimen of those produced by a peculiar variety of hens, (not Shanghais) raised by Mr. Jones. If any of our patrons can show larger eggs than these, we would like to see them. As yet we have seen no hen's egg that can compare with these in size." [Mineral Pt. Tribune.

Members of the State Agricultural Society—

Holding the same kind of tickets as last year, except re-dating to 1856 instead of 1855, will receive new ones instead, per mail or otherwise. We have got up a new style altogether, to cut off all chance of fraud or mistake at the Fair gate. We make this explanation that those who receive new new tickets may understand it.

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Dane County Agricultural Society—

The Executive and General Committee of this Society held a meeting on the 25th of April, pursuant to notice, President P. W. Matts in the chair. The Secretary being absent, Hon. Wm. M. Colladay was elected Secretary *pro tem.* Dr. Fox tendered his resignation as Treasurer of the Society, which was accepted. Moved by Wm. A. White that we hold a County Fair the coming fall, which motion was carried. Moved that the County Fair be held on Thursday the 2d day of October next; motion carried. Moved that the Secretary furnish each of the General Committee with a copy of the Constitution and that he be requested to exert himself, and obtain the assistance of the town, in obtaining members to the Society, and report at the next meeting. Moved the meeting do now adjourn to the last Saturday in June next, at 10 o'clock A. M.

P. W. MATTS, President.

WM. M. COLLADAY, Sec'y *pro tem.*

The above meeting was well attended considering the busy season, and showed a gathering of the best men in the County. The opinion seemed unanimous that Agricultural Societies and Fairs are prominent and important features of the times, and cannot be dispensed with. We hope the members of the General Committee, in each town, will feel that they are electad for the important purpose of representing the interests of the Society in their respective localities. The thirty-five towns in the County ought, on an average, to furnish at least twenty members apiece, which with the $100 from the State, and the amount that will be rceived at the gates of the Fair ground, would bring up the receipts of the Society to at least $1,000, three-fourths of which, at least, should be paid for premiuns. This would certainly make a handsome programme for a start in Dane County, and offer an inducement worth while to the farmers. Let every officer and citizen do his duty, and the result will be right and creditable to all parties.

Wheeler, Melick & Co.'s

Advertisement, on another page, is well worth the perusal of all who want a good Rail Road Horse Power Thresher, or anything else in their line—Machinery, Implements, &c. Their Horse Power, is among the most simple and durable that can be found. It has no gearing whatever—the chain passing directly over the shaft of the driving pulley—so that there is but little machinery to get out of order, or to repair. We think them much the best tread power we have ever seen, and purpose to have one for our own farm use.

The inhabitants along the line of the projected railroad between Milwaukee and Beloit are taking measures for its early completion.

The Bee Hive

Is the name selected by JACKSON & LUXTON for their splendid store at No. 146, East Water St., Milwaukee—and an appeopriate name we think it; for it is filled with the choicest gatherings of many a city, and the sweets extracted from many a flower, and its occupants are as busy as bees serving its invariably well pleased customers, from early morn until evening. Here the Wisconsin belle can deck herself in the most gorgeous and fashionable array; and milliners country merchants, or any body else, can buy laces, silks, embroideries, flowers and fanby dry goods in general, at terms little above New York prices. Their card for the coming year will be found on the last page of the cover of the FARMER. Call and see the Bee Hive, reader, when you visit Milwaukee.

Land and Collecting Agency—

It will be seen by reference to our advertising pages that JOHN S. FILLMORE; for a long time connected with the Milwaukee Sentinel, has opened a general land and collecting agency in Juneau Block, Milwaukee. Mr. Fillmore is so well known throughout Wisconsin, as an active, energetic business man, that we need hardly recommend him to those having any property for sale or collections to make. He advertises all real estate left with him for sale in several papers having the largest circulation of any in the State, and if any one can look up purchasers he is the man. As to collecting, we will only say that we hope no obligations against us will be left with him, unless we are prepared to meet them promptly.

A Fine Farm for Sale—

The Pine Lake Farm, situated in the town of Hartland, Waukesha Co., is offered for sale. It has the reputation of being one of the best farms in Waukesha Co., and as for beauty of location it has no superior any where. Read the advertisement, and if you want such a piece of property as is described, go and see it.

CURTIS' ONE PRICE STORE,

Will Remove,

ON OR ABOUT THE FIRST OF MAY NEXT,

TO WELLS' BLOCK,

(*Near Fox's Hardware Store.*)

R. T. CURTIS & CO.

Madison, April 15, 1856. myt f

BLOODED STOCK.

THE UNDERSIGNED offers for Sale 3 or 4 head of Full Blooded, Short Horned Durham Bulls—age, from one to five years—all capable of doing business the coming season.

The above Stock was purchased of the Best Cattle Breeders in the United States.

Said Stock will be sold on reasonable terms, and satisfactory Pedigree will be given.

C. S. BLANCHARD.

EAST TROY, Wis., April 14, '56. my. 1y.

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J. S. FILLMORE,

LAND, REAL ESTATE,

—AND—

COLLECTION AGENCY.

No. 2 Juneau Block, Milwaukee, Wis.

Mortgages Bought, Loans Negotiated, Real Estate sold at reasonable rates, Collections and Remittances

ATTENDED TO PROMPTLY.

PINE LAKE FARM AND COUNTRY SEAT FOR SALE.

SITUATED 25 miles west of Milwaukee, and one mile north of the Milwaukee and Watertown Plank and Rail Roads, and a mile and a half from Hartland and Pine Lake Stations, adjoining the lands of the late Geo. R. McLane, containing one hundred and ninety-six acres, forty-five of which are under cultivation and good fence. The improvements are, a Frame Cottage, ornamentally built, and of the best materials and finish, containing parlor, dining room, five sleeping rooms, kitchen, wood-house, and deep stone cellar under all. Piazza in front, and lawn planted with ornamental trees. A large garden, surrounded by a picket fence, and stocked with Asparagus, Strawberry and Raspberry beds, and Plum, Dwarf Pear, and other fruit trees. An orchard of one hundred trees of choicest fruit coming into bearing. An excellent well of water, with large, handsome well-house over. Rain water cistern of 60 barrels, with pump, supplied from the roof by metallic pipes. A new Frame House, containing carpenter shop, sleeping room, lumber room and loft. A new Frame Barn, 50 by 35, battened, verge-boarded, and tight finished granary and horse stable, large new cattle shed, &c. There is also a Log House and Barn, in tolerable condition.

There is beautiful building stone, quarried and piled up, on a magnificent building site near the Lake shore, sufficient for a large house. Adjoining the above, and to be sold with it, if desired, is a farm of 56 acres, with a Log House. Cars pass four times a day between Milwaukee and Watertown. The places are unrivalled for convenience of water, beauty of Lake scenery, and salubrity of atmosphere. Price $24 an acre. Apply to the subscriber on the premises. WILLIAM S. COX.

Apply to J. S. FILLMORE.

May, '56 tf. No. 2, Juneau Block, Milwaukee.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

any house West of New York.

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. E. POWERS.

BLACK HAWK HANNIBAL.

THE SUBSCRIBERS would announce to all interested in Breeding Good Horses, that the above named Horse, lately purchased in Vermont, may be found at the stable of T. C. Dousman, in Ottawa, Waukesha Co., on Mondays and Tuesday; at Palmyra, Jefferson Co., on Fridays and Saturdays of each week during the season, at the following prices, viz: Single service, $6,00; Season, $12,00; to Insure, $15,00. It is sufficient to know that Hannibal is of that Celebrated Breed of Horses universally known as the Vermont Black Hawks, which the subscribers can demonstrate by good authority.

PEDIGREE:

HANNIBAL was sired by Sherman Black Hawk, who could trot a mile in 2m. 36sec., and he by Old Black Hawk, owned by David Hill, of Bridgeport, Vt. Dam of Hannibal by Young Sir Walter, and he by Old Sir Walter—Old Sir Walter by Badger's Hickory, and Hickory by Imported Whip, and so through illustrious ancestors up to the English Eclipse and Darley and Godolphin Arabians. (See American Stud Book.)

HANNIBAL will be 6 years old in May, 1856, was bred in Bridgeport, Vt., by Dr. G. S. Gale. He is a jet Black, and weighs 1,100 pounds. He took the First Premium at the Addison County Fair when one year old, also the First Premium at the Clinton Co., N. Y., Fair, when two years old. He has never been trained for trotting—but when four years old trotted on Bennet's track, Vt., one mile in 3m. 7sec. He can show a gait at any time compatible with the spirit of the times.

N. B.—Good Pasturage for mares at customary prices. Single service and Season prices to be paid within the season, and Warrants by the first of March next. Mares parted with before foaling time, in all cases insurance must be paid, and also if not returned regularly to the horse during the season. There will be no variation in prices. Season ends August 1st.

C. H. BIRD,
A. ABERNETHY & } Proprietors.
C. A. LEWIS,

SUN PRAIRIE, April 20, '56. m. 2m.

BADGER STATE.

THE PROPRIETOR now offers to the public the services of the well known and celebrated Horse, BADGER-STATE, with full confidence that they will embrace the present opportunity of improving their Stock of Horses. He will stand in Lodi, Columbia Co., on Tuesday, Wednesday and Thursday of each week, and at the residence of the proprietor in the town of Bristol, Dane Co., on Friday, Saturday and Monday, season commencing the first of May and ending the 18th of July. I. INGALLS.

MAY 1, 1856. 1m.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,

L. A. WINCHESTER, WM. DeWOLF.

M. FRIEND & BROTHERS,

MERCHANT TAILORS,

DEALERS IN

READY-MADE CLOTHING, CLOTHS, CASSIMERS, VESTINGS, TRIMMINGS, &c., &c.

MILL'S NEW BLOCK, KING STREET,

MADISON, WISCONSIN.

☞ All orders will meet with prompt attention.

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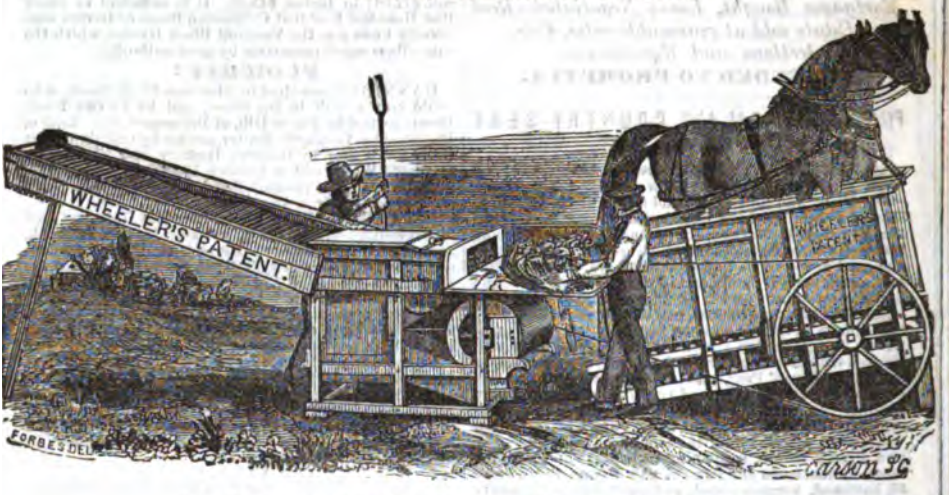
NEW YORK STATE AGRICULTURAL WORKS,

BY

WHEELER, MELICK & CO.



[*Double Power, and Combined Thresher and Winnower, in operation.*]

We are Macufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 160 bushels of Wheat or twice as many Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Overshot Thresher with Vibrating Separator.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price $160.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Combined Thresher and Winnower.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of Wheat and 300 bushels of Oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine. **Price $245.**

Also, Clover Hullers, Feed Cutters, and Sawing Machines.

Our Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines, that admit of being driven by Horse Power, and our Threshers may be driven by any of the ordinary kinds of Horse Powers in use—either are sold separately.

☞ To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery 22 years, and have had longer, larger, and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

☞ Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by the cheapest and best routes.

WHEELER, MELICK & CO.

Albany, N. Y.

May, 1, 1856. tf.

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MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Quince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Syringas, Calycanthuses, Enonymuses, Honeysuckles, Bignonias, Prairie and other Roses—Dahlias, Gladioluses, Tulips, &c., &c.

Vegetable Plants:

Tomato, Cucumber, Melon, Cabbage, Cauliflower and Egg-plants—the most excellent varieties.

FOREST, FARM, AND GARDEN SEEDS.—I shall also keep *Locust, Osage Orange*, and the most important kinds of Nursery and Vegetable Seeds, for sale at the office of the *Wisconsin Farmer*, and I have made such arrangements with large dealers in Milwaukee, Chicago, Louisville and some of the eastern cities, that I can fill orders for *all kinds of Seed*, of the best quality, at short notice, and at the lowest rates. Many kinds of seed can be sent by mail without much extra expense. Any one sending 12 postage stamps will have a 2 ounce package of Locust Seed forwarded to him.

ORDERS left at the *Farmer* Office, or sent by mail, will receive prompt attention. H. F. BOND.

MADISON, WIS., Feb., 1856. t.f.

UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1,—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.

COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT, do	do.	3,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz. Silver Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea
" Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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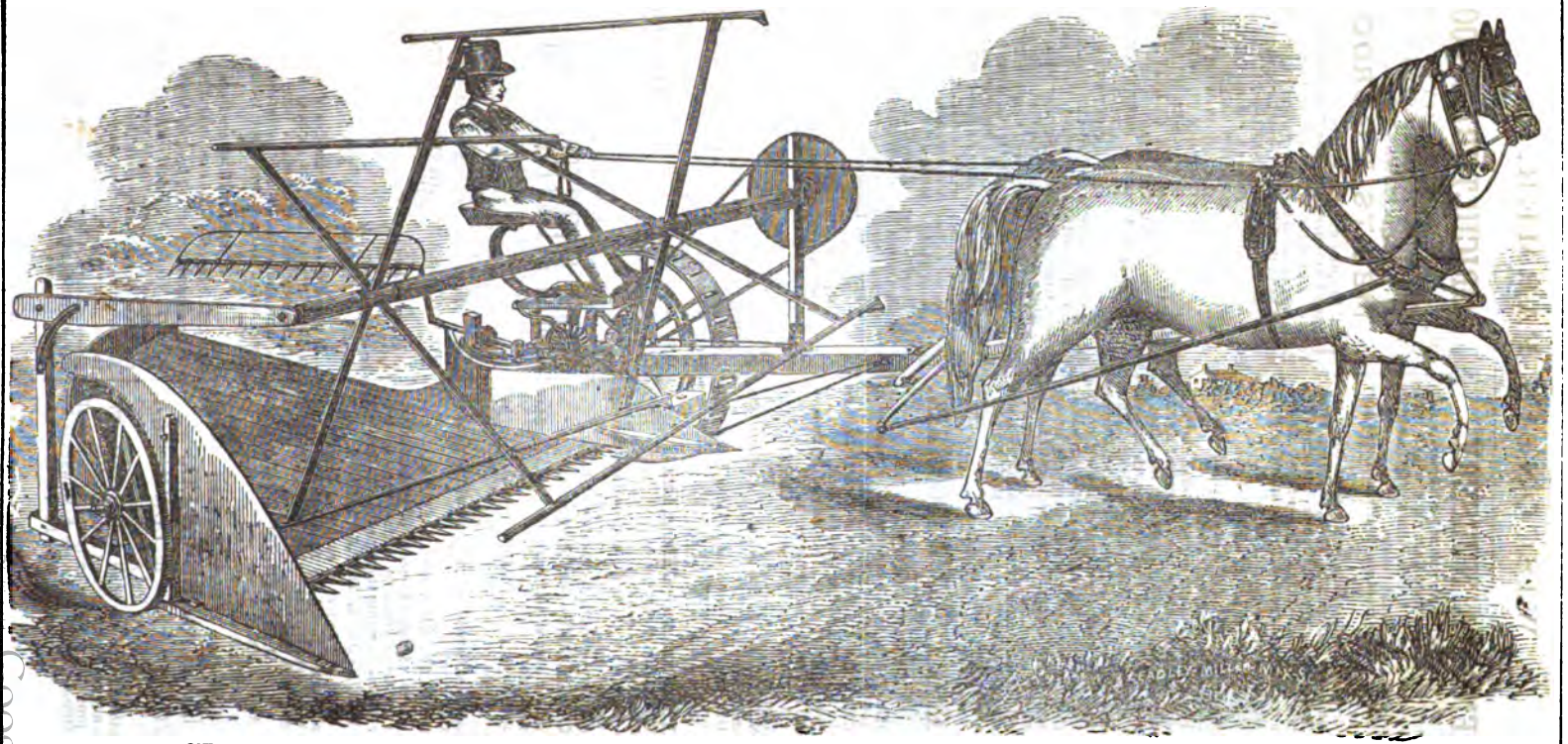
PATENT IMPROVED NEW YORK SELF RAKING



REAPER—WITH MOWER ATTACHMENT.

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SEYMOUR & MORGAN'S
PATENT IMPROVED NEW YORK
SELF-RAKING REAPER,
WITH MOWER ATTACHED !

ALL who have used a Reaper know something of the labor and skill requisite to rake off the grain in *good* bundles, and a *Self Raking Reaper* which should be simple in its construction, and durable, performing the work as well as the best hand-Raking machine, has been considered as a great desideratum, by all intelligent farmers. Such a machine is now offered to the farmers, and warranted to *cut* and *lay off* in *good* bundles from ten to twenty acres per day, with *one* man and a good team. The rake is *not* liable to get out of order, (like those of some other machines offered to the public), but is as durable as any part of *this* or any *other* Reaper. Among the important points of superiority in this machine may be mentioned—lightness of draught for teams, absence of side pressure, and width of cut 6½ ft. Made in New York of the best of eastern timber, it cannot fail to give satisfaction.

N. B.—Wet grain, grass or weeds form no impediment to the perfect working of the rake.

Price, delivered in Madison, $160,—$60, paid on delivery Reaper, and note given for $100, and interest due 1st Dec., 1856, which can be taken up for $95, if desired, after a fair trial in the harvest field.

Orders may be left at Fox's Hardware store, near the Court House. For circulars, descriptions, &c., apply to

apr-tf S. L. SHELDON, Madison, Wis.

Madison Agricultural
WAREHOUSE.
OF
SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constansly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS, Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns.
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " rivested Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,

apr-tf At sign of Pad Lock, Morris Street.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS & STATIONERY,
BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.

Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date, ... $1,374,284 00
Total amount of Premium Notes received, ... 21,500 00
do do Cash Premiums received, ... 11,454 00
do number of Policies issued, ... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and expenses paid to date, 9,871 40

Balance in favor of the Company Jan. 1, '56, . $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to Farmers and others wishing Insurance, a safe and reliable Company in which to insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:
B. F. HOPKINS, *Sec'y.* N. W. DEAN. *President.*
L. J. FARWELL. *Treas'r.* D. J. POWERS. *V. Pres.*

Directors:
L. J. FARWELL, N. W. DEAN, SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
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Jan. tf. C. C. OLIN, General Agent.

MILWAUKEE NURSERY.

BEING OBLIGED to clear eight acres of ground, thickly planted in nursery, we are offering *great bargains* in Fruit and Ornamental Trees. Our stock consists in part of 30,000 Apple trees, from two to five years old—5,000 Pear trees, both Dwarfs and Standards—1,000 Plum trees—500 Cherries—a good assortment of Small Fruits, and a very large supply of Ornamental Trees, Shrubs and Plants.

We offer the last named in assortments *very low*, viz:
10 Ornamental Trees and Plants of 10 varieties, our choice, for $1,00
50 " " " 15 " $3,00
100 " " " 20 " $5,00

The above will be securely packed and forwarded as directed. Plants with which the above assortments will be filled are all *hardy, healthy*, and *well grown*—from 2 to 4 years old, and from 1 to 3 feet high. The retail price of most of them is 25 cts., and of some, 50 cts. each.

All orders accompanied with the cash, and received before April 20th, will be promptly attended to.

☞ Catalogues sent *gratis* to all who apply. Address STICKNEY & LOVELAND.

Arp. 2m. Box 463, MILWAUKEE.

NOTICE TO FARMERS.

The undersigned are now receiving and have on hand, a quantity of choice **CLOVER** and **TIMOTHY SEED**, which will be sold in quantities to suit purchasers.

Also, **Garden Seeds**, from several of the most celebrated gardens at the East.

☞ We have a few pounds of FRENCH WHITE CLOVER SEED, for lawns. BOWEN & CHURCH.

Wholesale and Retail Grocers,
Near U. S. Hotel.

Cash paid for all kinds of Farmers Produce.

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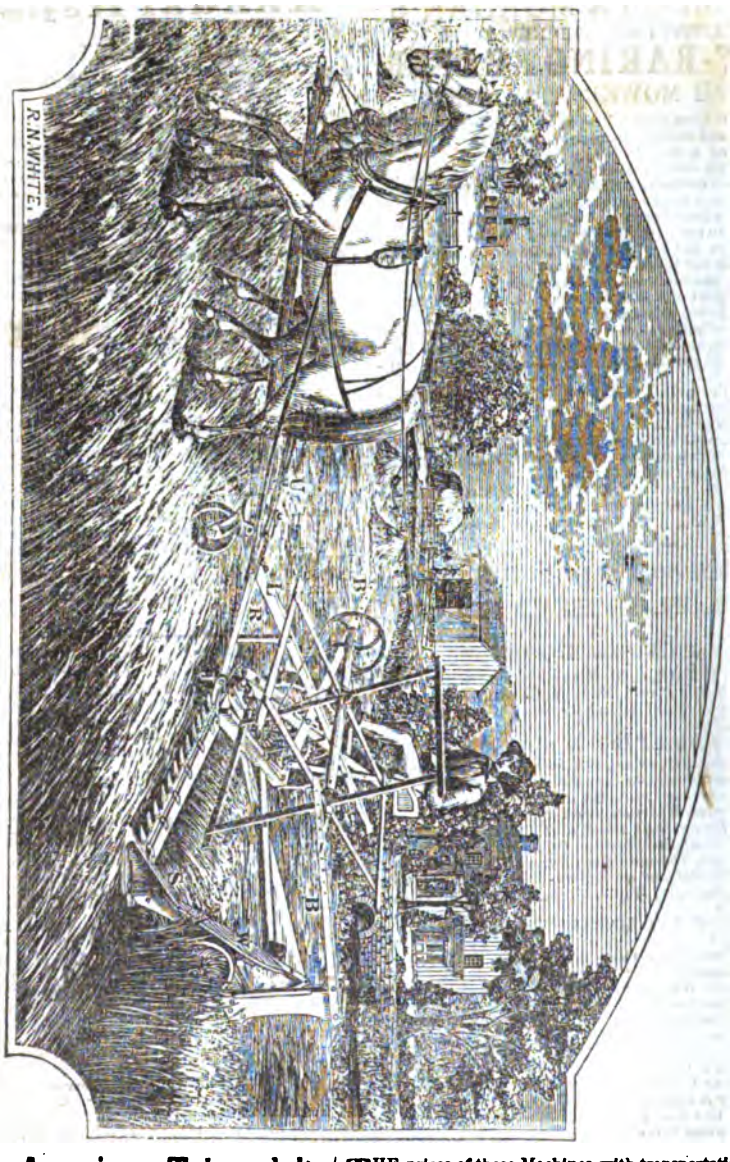

MANNY'S REAPER AND MOWER COMBINED—AS MOWING.

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent

ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation and ded, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - $135
For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - $145
For Single Mowing Machine, of about 5 feet cut - $120

Descriptive Phamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & Co., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices

AT THE WISCONSIN FARMER OFFICE.

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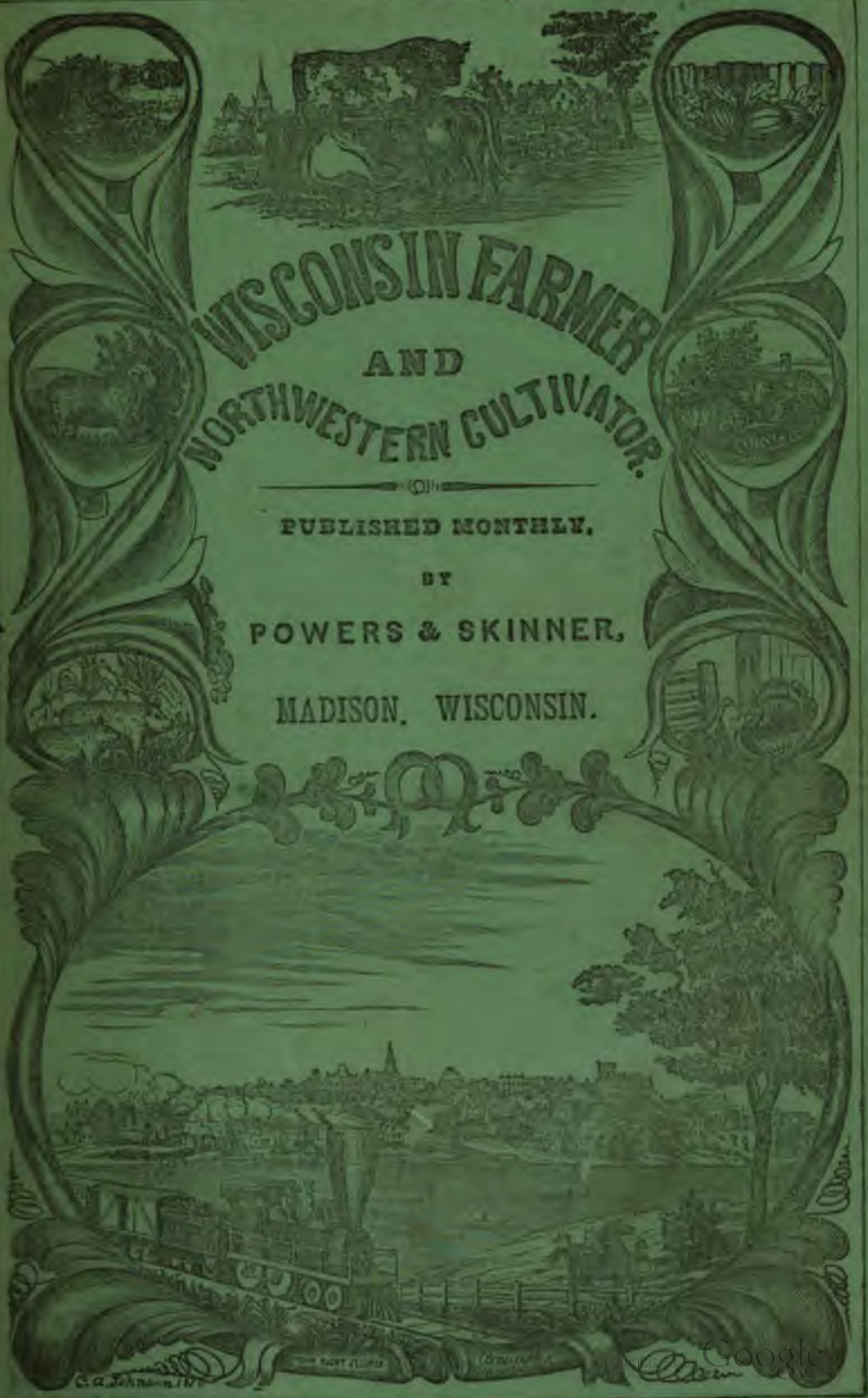
JUNE, 1856.



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TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with January and July.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**

MADISON, WISCONSIN.

D. J. POWERS. E. W. SKINNER.

ATKIN'S AUTOMATON,

OR,

SELF-RAKING REAPER AND MOWER.

1 (the first,) used in 1852.
40 used successfully in 1853.
300 in twenty different States in 1854.
1200 in all parts of the Union in 1855.
3000 building for the harvest of 1856.

THERE ARE SIX GOOD REASONS FOR THIS unparalled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of raking. 3d. It saves at least another hand in binding. 4th. It saves scattering by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf and does not drop, in the after handling, and the heads are not exposed in the stack, so that the GRAIN saving even exceeds the LABOR saving. 5th. It is a good Mower, being one of the best convertable machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 3 years) of OVER SEVENTY FIRST PREMIUMS!

PRICE—REAPER AND MOWER, $2 00.—$75 on its receipt $75 first September, and $50 first December. Price of SELF-RAKING REAPER, only $175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discount for advance payment.

To secure a Machine, order immediately. Though so little known the past season, and none ready for delivery till 1st May, yet not two-thirds the customers could be supplied. The reputation of the Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand, as twelve hundred did last year, and we shall also be selling four months earlier.

☞ Order early, if you would not be disappointed.

PAMPHLETS giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants and prepaid.

☞ Write to us at CHICAGO, (Ill.,) DAYTON, (Ohio,) or BALTIMORE, (Md.,) whichever is nearest to you.

J. S. WRIGHT & Co.

1865, Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., JUNE, 1856. NO. 6.

SUGGESTIONS FOR JUNE.

"The season now is all delight,
Sweet smile the passing hours,
And SUMMER's pleasures, at their hight,
Are sweet as are her flowers;
The purple morning wakened soon,
The mid-day's gleaming din,
Gray Evening with her silver moon,
Are sweet to mingle in." *Clare.*

Summer, with its bland breezes and sunny skies, has again returned. The swift revolving cycles of time have again spread its dewy carpets, and blossomed its many flowers. The prairies, the most beautiful of all landscapes, are decked again in their gayest robes; surely, Solomon in all his glory of purple silk and gold, "was not arrayed like one of these!" But alas and alack, looking upon them a hundred times a day will not fence nor break them ready for a crop of wheat. No, Sirs, it takes a plow and oxen, or horses, to do that, and our experience has taught us, under all reasonable circumstances, to prefer the latter. Yes, give us four good, well trained horses, and a 15 or 16 inch cast steel breaker, made light, but stout, and ground and polished as neat as a razor, especially if there is any clay in the soil; that is the breaking team for us, or rather for the man who knows how to handle four horses and a plow. We had such a man and team on our farm last summer, who broke two acres per day with ease, and turned over every furrow, which is more than is usually done by those we hire to do such jobs.

Three good heavy horses, side by side, make a good breaking team; but the plow should not cut more than 14 inches wide. With such a plow of the right kind, the team can travel right along, and do half an acre to a horse, easily enough. It is a mistaken notion, that a plow must be large and wide to do a good day's work. The big plow is simply to make up for the slow motion of the oxen, which at best are usually slow enough, even with a *power* of whipping and shouting.

The genuine Hoosier whip, with a stalk like a hop pole, and a *lash* to match, with a crack like a rifle, and a cut like a sabre, together with the Hoosier that wields it, is rapidly passing away in "these diggins," and the time will soon come, when their mighty prairie rooters, and all their accompaniments, will be banished to some newer, and less civilized western region. "'Tis well!"

June is the month for breaking prairie that you would have well settled for a fall or spring crop. The fore part of July may do, and the latter part often has to do, but it is bad policy. Good June breaking will cross-plow in October like an ash-heap; whilst August-broken turf will often withstand the action of the plow and drag for years. It is hard to make new comers and inexperienced men believe this; still it is none the less true for that. Therefore we say, hurry up your breaking, and do all you can before wheat harvest, and none after.

Those who are not breaking, are of course attending to weeding out the corn, carrots, and other hoed crops. Those who read our last number, will recollect how much we said about keeping ahead of the weeds. We shall take nothing of that back, but renew the admonition. Weeds, like bad habits, cannot be conquered unless they are attended to in season. A single stock of weeds reproduces thousands, hence how foolish to allow whole fields of them to go to seed.

A single mullen stalk is said often to produce 60,000 seeds; a full grown thistle as many more; still we often see them allowed to go to seed undisturbed, in the fields and angles of the rail fences, among our neighbors. We do not commend the policy, or rather shiftlessness, of the practice. In all these matters, "a stitch in time saves nine," and oftentimes nine times nine. Weeds at best are a nuisance, and like some earthly friends will ride us, just in proportion to the extent we indulge them. An extra day to each acre of corn, will often add five or ten bushels to the crop; how then could it be

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better spent, saying nothing about the credit and satisfaction always arising from a consciousness of a duty well done.

Carrots, in particular, will do nothing unless they are kept clean, and properly thinned out. Eighteen inches one way, and twelve the other, is near enough for a good crop, and the oftener the soil is stirred among them the better. It is but nonsense to talk of big crops of carrots, unless the soil is good, and well manured at that; and withal tilled just as it should be. This—not accident—is what brings the premium crops of carrots.

We raised a fine crop of both rutabagas and flat turnips last year, by simply sowing the seed upon new breaking, and dragging it in. Ready to dig, they did not cost us more than two cents per bushel; which was certainly cheap enough for as handsome turnips as they were. Still we do not consider the common flat turnip of much account as an article of food; it being above 90 per cent. water. It may be well enough for a change, but to really fatten a creature, of any sort, even a sheep, it is little better than fog. They are said to be excellent to bring sheep to their milk, when lambing before grass comes. We do not think very highly of any root crop for feed, except merely as a change. They are bulky and unhandy, and not unfrequently dirty and frozen. Give us the bran, shorts and meal, for milk or fattening.

The garden comes in for a good share of attention during the month of June. If it has been well planted that is the main point, but to keep it *perfectly* clean from weeds, is the next essential. And the easiest way to do it, is to follow it up close and seasonably. Everything will thrive twice as fast for being kept clean, and having the earth kept light and fresh about it. Peas, beans, and tomatoes should be bushed in season. Tomatoes, especially, are the better for having a light frame work put up to support them; made by simply driving down stakes 18 inches high, and nailing small strips on top of them, with an occasional cross strip to support them.

Flat or English turnips for winter use, should be sown the latter part of this month, and if the young plant is troubled with the fly, sprinkle dry unleached ashes over them while the dew is on. Especial pains should be taken in cutting pie-plant not to take off too many shoots at once, lest it kill the root. Cabbages thrive all the better for frequent hoeing when the dew is on.

The best preventive we know of for keeping hens from doing mischief in the garden, is to feed them well with what they are fond of, in which case they will usually be quiet and peacable. Almost all depredations on the part of animals, large and small, arise from neglect or starvation; creatures, even children, well cared for, are usually well behaved.

If you keep sheep—and you ought to have a snug flock, if well situated for it, especially as grain bids fair to go down a peg, and more especially as sheep are such an excellent animal to keep a farm in proper condition—we advise you to wash and shear your wool nicely, and put it up for market just as it should be; don't do it slovenly and dirtily because your neighbor does, nor because you think you can cheat the buyer by so doing. Remember that your character as a fair and honorable man will depend on your general practices; and if you are found to be little and mean in such things, you will be adjudged to be so in all things. Every good citizen should be too proud of the character of the State to send dirty wool or wheat to market; for, by such things we shall be judged.

When shearing your sheep, examine their hoofs and pare them up short, unless you have a rough stony pasture to turn them into. This timely care will prevent the rot. Salt them often, and tar the troughs a little every week, to keep them healthy and to drive off the maggot fly. If any signs of the scab appear, apply the tobacco water without stint; it is the best and cheapest remedy, and a sure cure, if used seasonably and thoroughly.

We have often thought the only legitimate use of tobacco, was killing ticks and lice on animals; and still continue of pretty much the same opinion. Still, we suppose that the amount now smoked, chewed, and spit oftentimes upon decent people's floors and carpets, costs more money every year than all the wool crop of America is worth. What an evidence of high civilization!

Of two evils choose neither. You may always avoid the choice of a positive evil.

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THE FOREST TREES OF WISCONSIN,

BY I. A. LAPHAM.

The Ash trees have been referred to the same natural family as the Olive of the south, (*Oliaceæ*,) though they differ so much in their botanical characters from the type of the family that many have doubted the propriety of the reference. Only two species are known in Wisconsin, though several others, of inferior value, grow in the north-western States. The wood of the White ash has the same general qualities of toughness, strength and elasticity, as the common Ash of Europe, which has been esteemed for these qualities since the remotest times.

25. *FRAXINUS AMERICANA*—WHITE ASH.

No. 25.—*Fraxinus Americana*, of Linn.—The following enumeration of some of the principal uses to which this wood is applied, will indicate its value in the arts. It is used for the tongues, and other parts of waggons, sled-runners, handles for wheel-barrows, scythes, rakes, hoes, pitch-forks, &c., for chairs, wooden bowls, hoops, staves, sap-troughs, blocks, pins, pump-boxes, hand-spikes, &c., for ship building, and especially for oars. No other wood is so valuable for oars, large numbers of which are annually made and sent down to the sea from the forests in the interior. The wood is quite soft when first cut, and easily worked, but becomes hard when dry and seasoned. It takes its name of White Ash from the light color of the wood. From the rapidity of its growth the annual rings or layers of wood are of unusual thickness. The tree grows straight and tall, the grain even, so as to split readily into straight rails.

It is reported that an Ash leaf rubbed upon swellings caused by the bite of musquitoes, removes the itching and soreness immediately. The same effect is produced on the poison occasioned by the sting of the honey bee. It is also stated that the rattle snake will not approach the place where the White Ash grows—that a branch, with its leaves, is a sure protection against that poisonous reptile; and that weeds and grain will scarcely grow in its shade. But these assertions require confirmation.

The flowers of the White Ash come out in May, and the curious looking fruit is ripe in July. For ornamental purposes the Ash is not a favorite; for though when young it assumes a beautiful form, age will soon break its charms; and one writer recommends that it be planted only in some inconspicuous corner among other trees.

Downing considered the highest and most characteristic beauty of the White Ash to be the coloring which its leaves put on in autumn, when it can often be distinguished from the surrounding trees for four or five miles, by the peculiar and beautiful deep brownish-purple of its fine mass of foliage. The color, though not lively, is so full and rich as to produce the most pleasing harmony with the bright yellows and reds of the other deciduous trees, and the deep green of the pines and cedars.

The figure (25) represents a leaf of one-fourth the size of nature, and the fruit of the full size.

No. 26.—*Fraxinus sambucifolia*, of Lamarck—the Black Ash.—The Black Ash usually grows in swamps or very wet places. It may be distinguished from the White Ash by the greater number of pairs of leaflets, which are sessile, with an obtuse base, and by the absence of a calyx in the flowers. It is sometimes very difficult to distinguish the species by the bark alone The Black Ash is much the most abundant kind in Wisconsin, finding many places suited to its growth in the eastern and northern parts of the State. It is a smaller and much less valua-

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ble tree, though it is applied to many useful purposes. The wood is tougher and more flexible than that of the White Ash, qualities that render it more valuable for hoops. The thin layers of wood are easily separated into long narrow strips, or splints, formerly much used for baskets and for chair-bottoms. The large knots are used for wooden bowls, not being liable to crack. The flowers appear and the fruit ripens about the same time as the White Ash.

The Blue Ash (*F. quadrangulata*, Michx.,) is found in Ohio and in Illinois. It is said to be found also about Lake Superior in upper Michigan. If so, it undoubtedly exists in Wisconsin, altho' I have never seen it here.

The Red Ash (*F. pubescens*, Waltr.—*F. sometutosa*, Michx.,) is a native of Ohio and Michigan; and the Green Ash (*F. jaglandifolia*, Lam.,) is also an Ohio species. These are all inferior in useful qualities to the White Ash, and are not very abundant in the places where they are found.

No. 27.—*Ulmus Americana*, of Linnæus, —the American or White Elm.—Though the American Elm is inferior to the European species in hardness, strength, and other useful qualities, yet it has its uses; and those who have seen it in its full growth under favorable circumstances, will readily agree with Michaux in ranking it as "the most magnificent vegetable of the temperate zone." It is therefore for its elegant and stately qualities as an ornamental tree that this species of Elm demands our care and attention. No one can visit New Haven, in Connecticut, without being fully impressed with the grandeur of this noble forest tree, nor without a degree of thankfulness and gratitude to those high-minded and generous men who, long ago, by their care and forethought have secured for us the means of enjoying its deep and grateful shade, and its magnificent appearance to the eye.

What these men have done for New Haven, let us hope the people of our State will do for the hundreds of towns and villages now just springing, as if by magic, into healthful and vigorous existence. Much of the interest we feel on visiting the old New England towns, is derived from the rows and groups of fine large Elms, with their light and graceful, often drooping branches, spreading to a great distance from the trunk.

The "Great Elm Tree" on Boston Common attracts the attention of every one who visits that delightful spot in the midst of a dense population. It is cherished as a sacred relic by all true-hearted Bostonians—an iron fence protects it from all others. It has recently been figured and fully described by Dr. John C. Warren, whose residence on Park street fronts directly towards the tree. His little work on the subject is full of interest. Many historical associations are connected with the "great tree;" and its age is ascertained to be such that it is supposed to have been in existence longer than Boston itself. Of all the native trees that witnessed the first settlement of the city, this one alone remains. At one foot above the ground it is 22 1-2 feet in circumference; the first branch is 16 1-2 feet above the ground; the whole height is 72 1-2 feet; and the extremities of its branches cover an average diameter of over 100 feet. But this is not the largest Elm tree known in the country. Let us reflect, when transplanting to our public and private grounds the small sapling, bereft of its beautiful head and robbed of its life-giving roots, that *if we succeed* in making the bare pole grow at all, it may have a history as interesting and may attain an age and dimensions equal to the Great Tree on Boston Common.

Fortunately the Elm is very tenacious of life, and will in most cases withstand the careless mode of transplanting usually adopted. When its branches are shortened it sends forth long and vigorous shoots, lined with dense rows of leaves. It is also of rapid growth—assuming when quite young its characteristic lightness, elegance, and graceful beauty. The comparative uselessness of the Elm is in its favor as an ornamental tree, and often causes it to be preserved, when farms are cleared, for the purposes of shade, being, as one is often told, "good for nothing else."

The flowers appear in May and the seeds are ripe early in June; they may be then immediately planted. But the tree is so common in our forests, of all stages of growth, that abundant supplies of young, healthy and vigorous trees may always be obtained without resort to the seed, or any other mode of propagation. The growth, under favorable circumstances, will be about half an inch in diameter each year.

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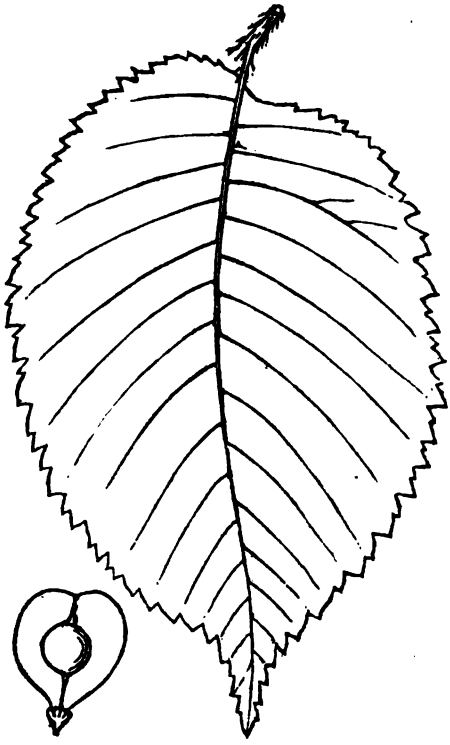
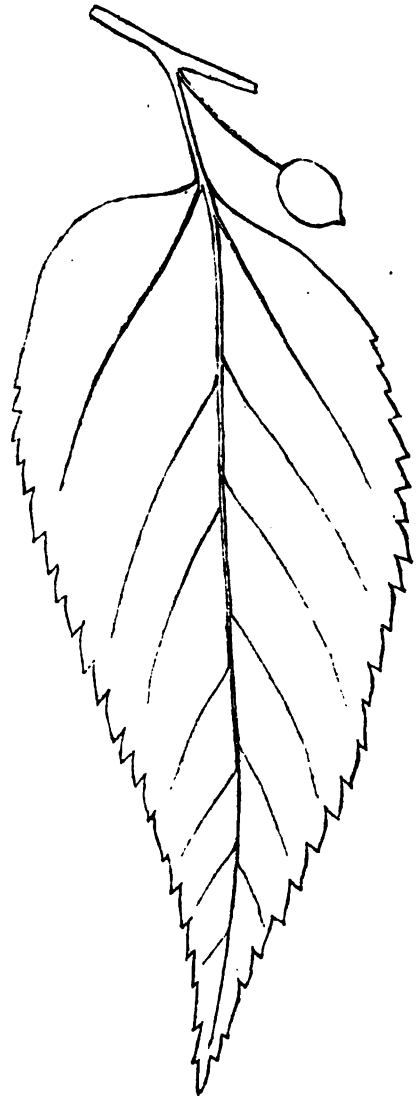
28. *ULMUS FULVA*—SLIPPERY ELM.



No. 28.—*Ulmus fulva*, of Michaux—Slippery Elm.—This Elm is less common than the last, in Wisconsin. It has a more rapid and vigorous growth, and coarser foliage. It is wanting in the beauty and graceful form of the common Elm, and is therefore much less valuable as an ornamental tree. Another serious objection to the tree for purposes of ornament, is the mucilage of the inner bark, which from its valuable medicinal qualities, tempts us to destroy the tree for the sake of the bark! The wood is generally used for the same purposes as that of the White or common Elm; but neither of them possess any great value. The flowers are expanded before the leaves, in April, and by the end of May, or early in June, the fruit is ripe. The above figure (28) shows the flat, winged fruit, of the natural size; and a leaf reduced to one-fourth the natural size.

There is one other species of Elm, first noticed and described by Mr. David Thomas, of New York, and hence named Thomas' Elm, (*Ulmus racemosa*, Thomas,) which may probably hereafter be found in Wisconsin. It is usually confounded with the other kinds, but may always be known by the flowers, which are on pedicels arranged in the form of a compound raceme. The branches are mostly covered, or winged, with a corky excrescence. In other species the flowers are in small clusters, and nearly sessile.



29. *CELTIS OCCIDENTALIS*—HACK-BERRY.

No. 29.—*Celtis occidentalis*, of Linnæus—the Hack-berry.—This tree belongs to the south and occurs so rarely in Wisconsin as to be but seldom noticed. I have found it,

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however, at Milwaukee; on Rock river; and at Fond du Lac; always on low bottom lands along the margin of the streams. In general appearance it much resembles the Elm, and is often doubtless mistaken for that tree by casual observers. The least examination, however, will show marked differences —especially in the fruit, which is a drupe or berry, that may be eaten. There is some confusion in the books in regard to the different species of Celtis growing in this country; but there are probably five species. A further examination and comparison of specimens is needed to clear up the difficulties.

There is a species in Europe, said to be very useful, the wood being only surpassed by the ebony and box in durability, strength and beauty. But the American kinds do not appear to possess those desirable qualities. Very little however is certainly known in regard to the value of the Hack-berry of this country. Its scarcity may be the only reason why it is not applied to many useful purposes, for which upon trial it might be found well adapted. It is said to grow rapidly; to form a handsome tree; and that it might be used as a shade tree in many situations where variety is desirable.

Figure 29 shows the leaf and berry, both of the full size of nature.

The Elms and Hack-berries belong to the same Natural Family, called *Ulmaceæ*, or the Elm Family.

For the Farmer.

A TABLE

Showing the Power of Water Wheels under a head or fall of from Two to Ten Feet:

Hight.	Factor.	Hight.	Factor.	Hight.	Factor.
2	0.0107	3¾	0.0276	7	0.0704
2¼	0.0128	4	0.0304	7½	0.078
2½	0.015	4½	0.0363	8	0.086
2¾	0.9173	5	0.0425	8½	0.094
3	0.0197	5½	0.049	9	0.1026
3¼	0.022	6	0.056	9½	0.1113
3½	0.025	6½	0.063	10	0.1204

Explanation.—Multiply the area of the sluice gate, in square inches, by the Factor set against the hight of the Fall, and deduct from one-fifth to one half of the product, and the balance will show the Horse Power of the wheel.

The Undershot wheel usually gives from 40 to 50 per cent. of the power, consequently one half should be deducted from the product. Overshot or Breast wheels give from 60 to 75 per cent., so deduct 1-3 or 1-4; Horizontal or Turbine wheels, from 70 to 80 per cent., deduct 1-4 or 1-5.

Examples:—Required the Horse Power of a good Breast wheel, using 500 inches of water, under a head of 8 feet?

0.086×500=43. 1-4 deducted, leaves 32 1-4 Horse Power.

Required the Horse Power of a good Horizontal or Turbine wheel, using 400 inches of water, under a 5 foot head?—

0.0425×400=17; deduct 1-5 and 13 6-10 Horse Power is the result. E. J.

TO CORRESPONDENTS.

In answer to "F. M.'s" inquiries about clay and gravel building, we would say that we never have had any experience in clay building, except that we once pointed a cellar wall with clay and sand, mixed ready for brick making. We thought it very nice and cheap until it come to thoroughly dry, when, to our sorrow, it cracked all to pieces, rendering it necessary to be dug out and replaced with lime mortar. We learned from that and all subsequent experience that clay has a great deal of shrinkage when it dries. Further, we think our moist climate would make such walls damp and disagreeable, and probably not durable.

Gravel or concrete, on the other hand, is not materially liable to any of the foregoing objections, and in our way of thinking is by far the cheapest mode of building for those who go the right way about it, and are in the neighborhood of gravel and lime. The processes will be found well explained in the May number, and we shall always cheerfully render any further information we can on request.

As to paper and gravel roofs, when compared with good shingle, we readily say we should much prefer the latter, but think the former a very good substitute, when from local circumstances it is desirable to use it.

In answer to R. F. Moore, we extract the following from the Country Gentleman:—

"With regard to killing crows by strychnia, I also doubt, though I have never tried it; but I have seen thousands of crows in a field sown over with wheat steeped in arsenica, 1 1-2 oz. to the bushel, but never picked up a dead crow. A very few grains of such wheat has killed a chicken that was foolish enough to eat it. Crows will not touch

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tarred corn, beyond a hill or so. I also think it protects it a little from insects, but it is a longer time coming up. I lost four acres last year by not tarring. I had done so with the bulk of my crop, but the weather being so wet I was not ready to plant these four acres until the first of June, and in order to gain time, omitted the tar. The crows took it as soon as it made its appearance. I planted again, strung twine around and across the lot, but it fared no better, and I lost my crop on a virgin soil. The other was never touched, scarce a hill being missed at hoeing time. H. H. B., NORTH EVANS, N.Y.

D. S. C., in the January No. of the FARMER, speaks of soaking corn in tobacco juice 15 or 20 hours, as a preventive against the incursions of birds, gophers, &c.

In answer to friend Lybrand, of St. Nicholas, Min. Ter., we would say, that red-top is considered the most desirable grass for meadow land that is too wet for timothy; and it is often sown on the natural meadow, without plowing. But in such a case, it should be sown early. Burn off the old grass, and just as the frost is coming out sow on the seed, say from eight to twelve quarts to the acre; then with a sharp harrow scratch the surface as thoroughly as possible.

As the frost is coming out of the soil, it is very tender and admits of getting in the seed very well; and unless thawed too much, there is no difficulty about the teams miring on the wettest land. This grass is worth fifty per cent. more than marsh hay, and will usually grow about twice as much to the acre, besides not winter killing early. Every farmer owning wet land should treat it in this way as early as possible.

For the Farmer.

FARM SCALES.

MESSRS. EDITORS—You ask in the February number of the FARMER if we farmers have each a platform scale. For one I can answer no, but I should like one if I could get one to suit me. I think that if the manufacturers of scales would get up one expressly for farmer's use, it would find a ready sale. We want one, the platform to be 2 1-2 or 3 feet by 4 1-2 or five feet, with the weighing beam low and a little further back than usual. We could then weigh stock or hay by making a rack to set on it. The main object with me would be for weighing stock—one that would weigh about 2,500. This I think would be large enough for most farmers. Now what say you and the rest of the farmers of Wisconsin? If it was made known through the FARMER that such a scale was wanted, I think we could have them at a small cost above the common one, and it would be about as portable. O. G. EWINGS.

LA GRANGE, Wal. Co., Wis.

We think the foregoing an excellent suggestion, and shall send a copy of this number to the scale makers, with this article marked. EDS. FARMER.

For the Farmer.

COZY CHATS—PATCHING.

"Cousin Jenny, won't you impart to me your secret of *managing* some things?"

"Why, Carry, I'm not a Free Mason, or an Odd Fellow, and have no *secrets* of which I am aware."

"Well, Coz., I must tell you that I'm a spy among my married friends, appropriating all the information I can pick up behind the curtain which screens the internal family arrangement from the public gaze. I shall soon have practical need of all the knowledge of this kind, that I can from careful observation scrape together—at least this is my hope."

"Why, Carry, are you going to *marry* and leave that elegant home of yours, and the father who dotes on you and lavishes every luxury upon you? Yet he isn't able to set you up in an establishment of similar style, and you must be extremely *lucky* if you have found any *young* man able to do it!"

Baby's shoes were tied, and it set down with unceremonious haste, and Mrs. Brooks caught up her work.

"Come, Carry, I'm all ears—I've said to husband a dozen times, 'Carry has changed she never used to be so *thoughtful*. Who is he?—where did you find him?—when will it be? and where will you go?"

"My question comes first—I claim the right of priority—answer me; afterward I'll tell you a long story. With all your large family, Jenny, you are never in a *flurry* with your work. Your husband never comes to you with, 'My dear, will you just sew a button on here?' or 'mend this rip?'—or 'find me a pair of whole hose?' The children's chothes are always in readiness, and with such a host of them, how can you keep their

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wardrobes *all* right? I know of families where the *mending* is considered a disagreeable duty, or one that can be easily put off—till it's hard finding anything *perfectly* in order."

"So far as my needle is concerned, Carry, I make the *mending* a CHIEF thing. 'A stitch in time saves nine,' is as true as two and two make four—and it's easier and more economical to mend than to make, in our circumstances. Just step into this closet. There's my large mending basket. After the wash every article is examined before distribution: if a stitch is wanted it is laid here. In my perambulations about the house, peering into closets and drawers, if I find anything that wants *fixing*—needing new bands, or collars, or half sleeves, or knees, or elbows—it is laid here. Those three bags—one labelled 'colored pieces'—another, 'white,' and another, 'woolen'—contain only pieces of garments in present wear, or such as I am constantly liable to need; so that I need not defer till I have time to go up stairs and get materials from my large piece bags; they are generally at hand. This small basket is for *hosiery*—in it is a needle-book of darners—thimble and scissors, and all necessary varieties of cotton and yarn. At any odd time, I can catch it up and *embroider* away for a while, and set it back without disturbing my regular work-basket. I make it a striving point to vacate these baskets every week, and endeavor on Saturday afternoon to repair colored and white starched clothes—it is easier and prevents their being rumpled after ironing. There, now! say *thank you*, and tell me—hark! sleigh bells in the lane, and there comes dear Mrs. Merton! Carry dear, draw the large rocker out of the parlor, while I replenish the fire. Now, Carry, consider your 'brain pan an empty hull'—you'll learn more from that dear good old lady in an afternoon visit, than from a whole month of your ordinary calls—I mean of things that relate to internal life, and the practical duties of outer life. She has a vast store of long life experience and observation stored in her well trained, well balanced and well informed mind—and you may be sure I draw all I can therefrom. I call her mother in this my adopted state."

ELSIE.

WAUKESHA, Wis.

For the Farmer.

GEOLOGY—MINERAL WEALTH OF WISCONSIN.

MESSRS. EDITORS—The purpose of these communications was explained at the commencement of the series. It was thought your readers might be benefitted by calling their attention to some of the more prominent geological formations of the State—the general facts relating to the origin of soils, and adaptation to agricultural purposes—and to mines, minerals, and other matters of general interest. How far the end has been subserved, is for each one to judge. In speaking of deposits covering such broad areas as some of our rock formations, it has not been intimated that there were not, or might not be, local exceptions, either of fertility or barrenness—the result of causes not within the scope of such brief articles. It is to the State as a whole, and not to neighborhoods that they are designed to apply.

Notwithstanding this precaution, I perceive that some of the papers of the State are disposed to deny their correctness—ignoring both data and fact—and what is of less consequence, classing the writer in quite a low scale in point of experience or intelligence. I trust you will excuse me in this, once noticing statements conflicting with the truths of geological science. It may be the shortest means of disposing of mere caviling.

I stated in a former number that northern central Wisconsin was a Primary region, geologically speaking; the soil and superior rock deposits resting upon a granitic base. This statement, at once obvious on the least personal inspection of the rock, by any person in that portion of the State, is substantially denied by the editor of the *Pinerg*, at Steven's Point. He is probably over-sensitive in a laudable anxiety to build up that new country. He is of opinion that OWEN, and other geologists (Messrs. FOSTER & WHITNEY, WHITTLESEY, &c.,) have been humbugged by agents, assistants and sub-assistants—and that I have been worse humbugged by believing their reports, having never, as he thinks, seen anything of that section under review. In proof of this, he cites the rapid growth and settlement of the north as evidence conclusive. Yet if the editor would but take the trouble to look at the bed of the Wisconsin, perhaps visible

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from his office window, he would have seen in its granitic composition the proof that there is no humbug so far. He will find the same true from Grand Rapids to Little Bull, and all the rest of the *Bulls*—and at the rapids of nearly every stream flowing either east or west from the center of the State. With such evidence before his eyes, what occasion has he to dispute a plain and palpable fact? So of the country considered as a water-shed or the source of streams. I was unfortunate enough to speak of it as abounding in lakes, marshes, &c., as might have been inferred without the stating. The evidence of geologists, of travelers, of plats in the Land Office, and of all the latest maps, proves this. The streams have generally quite low banks, and in seasons of high water considerable areas are o.erflowed, taking the country as a whole. Why should this be denied? So the water from all these streams is soft, indicating the absence of limestones. Would he have us believe in the existence of extensive deposits of this rock in that section? Again, what is the generally understood character of a *pinery* soil? Is it a rich black loam, or is it sand? Having never seen an evergreen forest growing upon rich bottom or upland, I hope to be pardoned for having inferred that a pine country was a sandy one. But omitting all such evidence, derived to some extent from other sources, let me say to my friend that notwithstanding his opinion to the contrary, I have wirtten little in these articles not the result of personal experience and observation. Having passed many weary weeks in the wilds of the north and north-west, and having traveled many thousand miles over the surface of Wisconsin, I am not often compelled to refer to OWEN, or any other writer, for the correctness of my statements on this subject. It is not probable that assertion or ridicule will affect the correctness of these observations.

The *News* at Milwaukee takes occasion to garble and pervert the communication in controversy, making me say things never said; and having thus succeeded in making out a case, falls to and takes a tilt at my initials, giving vent to much distressing wit, the while. I have a faint suspicion that the contemplation of a few thousand acres of pine lands, bought on a thirty years' credit, at ten shillings an acre, without the payment of any portion of the principal, and held for sale, may possibly have biased the editor's geological judgment in the premises.

Having thus disposed of this matter, let me say, my sole object has been to call attention to the capacities of the State, for agricultural and other purposes. In classing the northern central portion as Primary, (as every geologist has and does,) no more was intended than was exactly true. A large area of New England may be thus classed. Some of us have reason to remember that that portion of the Union is settled—that men actually live and flourish there; and why not in a similar geological section of the West? To say that a country is not fitted for extensive and permanent grain growing —that it is a pinery, and sandy, is in no sense to disparage it. The geologist in calling attention to the subject was to show that Wisconsin had three great internal sources of wealth—agriculture, mining, and lumbering, or manufacturing—elements possessed by no other Western State—that these elements mutually aided and acted upon each other to the benefit of all—and hence that our future was full of hope of becoming a great and wealthy member of the Republic.

I trust not again to occupy your space with explanations, but with some more practical matters Yours, &c., H. A. T.

REMARKS.—With regard to the personalities that seem to have arisen between the author of the foregoing article and the editor of the Pinery, we feel called upon to say that it is a matter in which we propose to take no part whatever. We regret the feeling that seems to have been stirred up—a flurry that would scarcely be noticed in a political paper, but altogether unlooked for on our part, and out of place in the FARMER.

We give place to the foregoing article, notwithsfanding its not *very* scientific character, but do not propose to be the medium of any further sparring between parties, all of whom we have occasion to regard as particular friends to ourselves and the FARMER.

The legitimate province of the FARMER is not to disparage any portion of the State, (for we have no doubt that each section has nearly equal advantages, all considered,) but to upbuild and develope alike the resources of every district.

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Such will be our unvarying and steady purpose, and none other; and whilst we solicit contributions from all, to carry on this laudable undertaking, we particularly hope to avoid all of that grating and *rasping* of feeling, that seem to be wearing away even the solid foundations of the political world, and all good fellowship between men politically opposed. Our mission is especially one of "Peace and good will to men," of fine farms and farmers, fat cattle, and lusty productions generally. EDS. FARMER.

For the Farmer.

SWEET POTATOES.

MESSRS. EDITORS—Can I afford to stop this busy time to write for the FARMER? Well, so be it. Facts and experiences are worth a thousand theories. My experience in Sweet Potato raising commenced two years ago this spring. I got my potatoes between the 20th and 30th of May. My hot-bed was drowned out with rains, so that I only had the heat of the sun to sprout them. The last of June the sprouts were large enough to set; but it was so late that I gave up all hope. I set 500 hills, however, without faith, and harvested better potatoes than I raised *last* year. It was a very fine summer. Last year, I sprouted some potatoes in the house, and commenced setting the first of May. The heavy frost that we had the last of May, or the first of June, did not kill but a few hills. I set some as late as the middle and last of July, that grew to the size of my thumb, on an average. These kept best; it may be owing, however, to the fact that the gentle fingers of my nearest friend harvested and packed them for winter keeping.

To raise the Sweet Potato, make a hot-bed and lay them in half an inch apart. A bed 7 feet 9 inches by 5 feet 8 inches, will do for two bushels. Cover them with fine loose dirt, lightly put on, about 2 inches deep. They will bear 90 degrees of heat. The sprouts will appear in about 15 days. When they are three inches high you can pull them off with the left hand, laying the right over the potato to prevent it from rising. Make the hills before you set the plants; this may be done with the hoe, or you may back-furrow with the plow, thus making ridges 3 1-2 or 4 feet apart. Then with the hoe put them into the hills. The higher the hill, the longer the potato, at the expense of the diameter. A large hill does not heat through as well as a small one. I tried both ways last year; 4 rods of large hills yielded eight bushels of long potatoes, and 4 rods of small hills yielded ten and a half bushels of better potatoes. There were *more* of the small hills. Perhaps if we had had as warm a summer as the year previous, the result would have been different.

I am sorry to say that I have not succeeded well in wintering my potatoes. I put up 75 bushels; all rotted but about 6 or 8 bushels. I cannot say that I am much disappointed in this; it is more a wonder that I kept any. My faith in wintering them is not shaken in the least. Indeed, I feel more assured than ever that it can be done easily. Those I have are now all in the hot-bed, and the sprouts of some are now (Apr. 17th,) above the ground. I should have divided with my friends if they had been sufficiently sound to bear a journey. To prevent disappointment, I have ordered 10 bushels. They may not be on hand till the 10th or 20th of May. They may be here by the 1st of May. I intend to sell sprouts to all who want them. I forgot to say in the proper place that we put two sprouts in a hill. With the hand level a spot about 6 or 8 inches across; then thrust the whole hand into the hill near one side, and set the sprout pretty deep. If the ground is dry, put in half a pint of water to each sprout. B. C. CHURCH.

P. S.—In looking over the Premium List for '56, I do not notice the Parsnip among the vegetables. Was it intentionally or not that it was omitted? The Parsnip is rising in reputation very fast. I think it superior to the Carrot. I intended to compete for premiums on all garden and some field crops.

Truly yours, B. C. C.

WYOMING, Wis. April 17, '56.

We hope our friend CHURCH will compete extensively for premiums, and doubt not that he will be successful, from his systematic way of doing things generally. In relation to Parsnips, or anything else that may be omitted in the Premium List, we would say that they would probably come in under the discretionary and miscellaneous department, if of merit sufficient to warrant it.

EDS. FARMER.

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QUESTIONS AND ANSWERS ABOUT GRAVEL BUILDING.

MESSRS. EDITORS—If you think any or all of the following queries of importance enough to warrant an answer in your columns, I should be glad to see it.

Very respectfully,
JOHN HOLLINGSHEAD.

MINERAL PT., May 7th, '56.

CONCRETE WALL.

Ques. 1.—Is concrete made with water lime as good for the foundation of a building as stone work?

Ans.—We think not, nor is anything else as good as stone. Still, concrete of water lime and sand, or gravel, packed as full as possible with stones of all sizes and shapes, makes a good enough foundation for any common structure.

Q. 2.—How are the boxes, or curbing plank kept from slipping down?

A.—Our usual way is to nail bits of board on the upright standards, letting them project in enough to catch the edge of the curbing plank.

Q. 3.—Are the broken stones, and other broken materials of any advantage to the wall, except to lessen the expense?

A.—Yes; we consider flat stones packed in so as to over-lay each other, calculated to strengthen the wall, as well as to save materials. Still a sufficiently strong wall can be made without them.

Q. 4.—Is it as well to lay the stone in the mortar after it is in the box or curb, as to mix them thoroughly before?

A.—Yes, much better. Put in thin layers of mortar at a time, and pack full of stone, the closer the better; they will dry the wall all the better.

Q. 5.—If lime is used, will not the wall be damp?—would not water-lime be better?

A.—Yes, undoubtedly, water-lime would be the best, were it not for the extra expense, but common lime is good enough.

Q. 6.—What would be the advantage or disadvantage of making the concrete into blocks or *adobes?*

A.—No advantage whatever; they would crumble too easy in handling, unless they lay a long time to harden.

Q. 7.—Could the walls of a building be made smooth enough on the inside to dispense with plastering?

A.—No, not without extraordinary pains.

Q. 8.—Will the different layers cement together, so as to make the division imperceptible?

A.—Yes; the joining will be perfect and strong, but will show unless great pains is taken.

Q. 9.—Would it be practicable to mix a cheap coloring material with the mortar, to improve the outside appearance?

A.—No; it would take too much materials. It is better to hard-finish outside, and block off, like stone work, to make a fine job.

Q. 10.—What is the work of Lieut. Wright, referred to in your May number, and are there any others of use to one embarking in this kind of building?

A.—FOWLERS & WELLS have just published a work entitled "Home for All," that is suggestive. Lieut. Wright appears in some Governmental Report, but we do not remember what volume.

Q. 11.—How is it determined when the concrete is dry enough to remove the moulds?

A.—Experience will soon tell you this, and many other things, about this kind of building.

Q. 12.—Where can I get a copy of the Proceedings of the Wisconsin Fruit Grower's Association?

A.—Probably of CHA'S GIFFORD, Esq., of Milwaukee, President of the Association.

If we have not answered the foregoing queries at as great length as could be wished, still we hope we have made ovrselves intelligible. For want of space we have been as brief as possible. EDS. FARMER.

For the Farmer.

TO DESTROY BARK LICE.

GENTLEMEN—I notice several references in the FARMER to Bark Lice on apple trees, and also several suggestions respecting the means of destroying them. Please state the following, and leave any of your subscribers to try the experiment for himself: Where the Bark lice have been very numerous, I have *whitewashed* the tree about the first of June, with *salted* whitewash (about as much salt as lime,) *with perfect success.* The last trial was in this (Grant Co.,) two years ago, and I have not seen the sign of a louse after six weeks from the whitewashing till now.

I have a chapter in store for you at some

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future day, respecting *Potato Rot*, which I want to be inserted in the August number, the proper time for making the observations to which I desire to call attention. Meanwhile, let every potato grower stop *theorizing*, (leaving that to fops who neither know how to plow or hoe,) and *use their eyes*, and the mystery of the potato rot will soon cease. A. P. J.

PLATTE SUMMIT FARM, Wis., May '56.

Would it not be well, friend J., to furnish your article on the potato rot for the July number, that it may be well before the public in season to make all the observations?

EDS. FARMER.

PATENT OFFICE SEEDS.

Our receipts in this line have been considerably smaller than we had reason to expect, from the assurances received from the Patent Office Department. But such as we have had the fortune to get, we have distributed among the members of the State Agricultural Society, to the best of our ability. We publish in connection herewith a communication from D. S. Brown, of the Agricultural Bureau, to the Chairman of the Committee on Agriculture, of the House of Representatives, setting forth the past action of the Department, in distributing seeds, cuttings, roots, &c., and also suggestions for the future. The policy proposed to be pursued in this important department, strikes us as eminently sound, and worthy of a government and people like ours. Dollars ought, and will hereafter be spent in this way, where cents are now. The following article will explain why our supply was so short and late this year:

D. J. POWERS, Act. Sec'y.

UNITED STATES PATENT OFFICE, March 31, 1856.

Agreeably to request, herewith I furnish you with some of the principal reasons why Congress should increase the agricultural appropriations hereafter to be expended by this office with some of the benefits to the country which have already resulted from the appropriations made years past.

One of the prime objects of these appropriations has been the introduction of new and useful vegetable products hitherto unknown in the United States, and the increase and dissemination of those of superior qualities which had already been cultivated or otherwise known. Measures have been taken to procure from every quarter of the globe, such seeds, plants, roots and cuttings as would be likely to succeed in any part of the country, and placing them in the hands of persons who were the most likely to test their adaptation to our climate and soil. As a matter of course, many of the experiments thus made unavoidably prove abortive; but in numerous cases, they were attended with the most signal success, and a single product, in the opinion of competent judges, has added millions to our resources. For instance, a variety of wheat known as the "Mediterranean," which was brought to this country a few years ago, has proved highly productive, hardy and maturing several days earlier than other varieties, thereby escaping the ravages of insects and rust, besides being sooner ready for market.

Within the last year not less than seventeen varieties of wheat have been introduced from distant parts of the globe, and distributed in various sections of the Union, most of which promise to be attended with good success.

The "Indian mixed" or "Dourah corn" of African origin, has also been introduced, and it constitutes a valuable crop in the South.

The "Japan pea," unsurpassed by all the others in its yield, believed to be of Eastern origin has been cultivated in various parts of the country with remarkable results.

The "Chinese yam," origionally from China, but more recently from France, which promises to serve as an excelent substitute both for the sweet and common potato, has been sufficiently tested to prove its value in the Southern as well as in the Middle States.

The "chufa" or "earth a mond," a small tuberous esculent, from the south of Spain, which has naturalized itself to our soil and climate, has proved prolific in its yield when grown in light sandy soils, as well as those which are rich, and bids fair to become a valuable forage crop for cattle and swine.

At least thirty varieties of turnip seed, including the best cultivated in England, as well as on the continent in Europe, have imported and disseminated in every State and Territory of the Union. The benefits are already apparent. Similar experiments are now being instituted with all the leading varieties of grasses, cabbages and peas of Europe, the result of which will soon be made known.

Among the forage crops it may be mentioned that the Chinese sugar cane (So gho Suche,) a new gramineous plant, of Chinese origin, but more recently from France, has been introduced and has proved itself well

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adapted to the geographical range of Indian corn. The amount of fodder which it will produce to the acre is estimated to be twenty-five tons; the stalks of which are filled with a rich saccharine juice, the whole plant being devoured with avidity by cattle, horses and swine. It is of easy cultivation, being similar to that of maize or broom corn; and if the seeds are sown early in May in the Middle States, two crops of fodder can be raised from the same roots in the season —one about the first of August, and the other in October.

Another valuable forage crop, the "German millet" (*Mohn de Hongrie*) has been introduced from France, which is very productive, of quick growth, resists drought, and flourishes well in dry soils.

Among the cuttings of fruit trees and vines which have been introduced may be mentioned the "Prune d' Ageu," the Prune Sainte Catharine," and the "Vigne Corinth." The two former have been grafted on the common plum in all the States north of Pennsylvania, and on the mountainous districts of that State, Maryland and Virginia. From the succes which has attended this experiment, there is every reason to hope that there will soon be produced sufficient dried prunes in those regions to supply the wants of the whole Union. Among the seeds of indiginous growth, which have been selected and distributed, in reference to their superior qualities, as well as to their probable adaptedness to certain parallels and localities, and which have proved highly productive, there may be noted several varieties of Indian corn.

Among these are the "Iimproved King Philip," or brown corn obtained from an Island in a lake in New-Hampshire, which was extensively distributed in all the States north of New-Jersey, and the mountainous districts of Pennsylvania, Maryland and Virginia. The result has been that it matured in less than ninety days from the time of planting, (about the middle of June,) and yielded, in one instance 134 bushels of shelled corn to the acre. Another superior variety, from New-Mexico, the "New-Mexico White Flint," has been distributed, which appears to be adapted to the entire corn region south of Massachusetts. For ordinary use, either green or dry, its quality of excellence is unsurpassed.

Among the products which it has been proposd to introduce from abroad, with a view of making special experiments, to be conducted by agricultural societies or by individuals in the several States and Territories of the Union, may be named considerable qualities of all the very best varieties of wheat and of other cereals of the globe. In addition to these there might be imported the seeds, roots and cuttings of all the principal economical plants and trees known, and experimented upon in a similar manner.

In connection with the subject I would suggest the expediency of Congress making the annual appropriations for the purpose of agriculture sufficiently early in the season to order most of the seed to be grown the approaching season, so that they may be received in time for distribution by the first of January or before. For it has been found by experience that when large orders for seeds have been made after the month of April or May, it was impracticable for the seedsman to furnish an adequate supply without procuring them from various sources and this too often requiring several months. Hence most of the seeds would arrive too late for the southern and middle sections of the Union; or if they were attempted to be kept over till the next fall they would be either devoured by vermin or insects, or rendered worthless by age.

Another feature connected with these appropriations which appears to need simplification or reform, is some more feasible and equitable plan of disposing of these seeds than has been adopted heretofore.

I would therefore suggest that, instead of distributing them promiscuously, through members of Congress, societies or individuals, who may apply directly for them at the Patent Office, suitable arrangements be made by said members for them to be sent, in bundles not exceeding four pounds weight, franked by the Commissioner of Patents, to the Stase, Territorial, or County agricultural societies, or to the Secretaries of States or Territories, or County Clerks, where there are no such societies, to be distributed by mail or otherwise, to proper individuals residing in each State, Territory or County, for trial or special experiment, with a request that each recipient shall report the result for the use of the Patent Office.

To insure the free and speedy transport of each small packet of cuttings or seeds, an appropriate stamp might be placed upon it, bearing the imprint of the name of the member of Congress or Territorial delegate in whose district or Territory any such society may be located, or in which any Secretary of State or Territory, or County Clerk may reside.

The apportionment of the packets sent to the State societies might bear a stamp containing the name of the Senators of each of the States respectively. This change can only be effected by an amendment in the postal law, and necessarily would come before the Committee on Post Offices.

Very respectfully, your ob't servant,

D. J. Brown.

Hon. David P. Holloway, Chairman, &c.

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A PROGRESSIVE COMMUNITY.

The editor of the Wisconsin Mirror (known throughout the Union as "the paper published in the woods,") is rejoicing over the progress of the settlement. He says:

"If we don't describe our community now, it will be so large we can't. We have six married men, five married women, and one 'aunty;' four young men, four young women, and a very big half dozen children; and lots of workmen brought here every morning and taken away every evening by Ager's omnibus. We have one engineer, and dam-builder, one boarding-house keeper, two joiners, one secretary, three printers, one devil, and one editor—the last two being quite intimate. The commander-in-chief smiles so when he gives orders that none of us can have a heart to rebel; the colonel is the happiest creature that ever lived—away from his wife so long; the captain amuses himself vastly seeing how full he can stuff the stomachs of his guests without splitting them; the chief builder talks as deliberately of architraves, balusters, columns—Ionic, Doric, and Tuscan—as a successful politician does of the last election; and the editor makes himself merry telling these drolleries. The women wash Mondays (and if the Col. don't send ice, the men bring water fifty rods with neck-yokes, without grumbling,) iron Tuesdays, or Wednesdays, visit Thursdays, Fridays, or Saturdays, receive calls, and get nice meals every day, and keep so busy and cheerful doing their own work and minding their own business, that they have no time to scandal each other. They and the girls have finished up their calls upon each other, and commenced visiting; and the husbands intend to "go to tea" every time, whether they are invited or not. The superintendent is hurrying up matters to get his family among us; and two old bach's stand shivering outside, agitated with hope and fear—hope that they may yet be admitted to the joys of our circle, and fear that if they should be they would have to build houses and get married! We have one piano, two melodeons, one drum, and two home-made four-legged stools, because there were'nt chairs enough; one flute, one flageolet, one fiddle, and sometime's Ager's tin horn. We have two horses, one cow, and one calf; four canary birds, two cats, no dogs, twelve hens, three owls, and twenty-five partridges; besides Col. Anderson's mules over the river—and when we get a railroad, school-house, and bell, we shall be the happiest community in Christendom.

P. S.—Since the above was written, others have moved in, but they are so unsettled that it would be as difficult to describe them as it was for the Irishman to count his pig, it frisked about so."

APHATE BICAUDATUS, OR APPLE LIMB BORER.

Wm. Owen, Esq., of Portage City, sends us a specimen of the above insect, or bug, together with a specimen of his work in boring into the small limbs of apple trees. He states that they have made extensive ravages in a fine orchard belonging to Judge Guppey. Their mode of operation is to enter the small limbs at the bud, or just below it, and follow the pith for an inch or two down the stalk. They seldom attack branches of any size. They are a small brown or black bug, about three-eights of an inch long, and are known to entomologists as the *Aphate Bicaudatus*. Any light that can be thrown upon their character, habits, and the best mode of avoiding their mischief, by those who are acquainted with them, will undoubtedly be quite acceptable to our numerous readers.

We doubt not that we will hear of their depredations from not a few. They were quite plenty in our orchard two years ago. We went from tree to tree, and slew all of them we could find, and that is the last we have seen of them.

For the Farmer.

THE NEW ORTHOGRAPHY.

Messrs. Editors—Presuming that you are as ready to assist the farmer in cultivating his mind as you are to aid him in tilling his soil, and that you feel as much interested in shortening and cheapening the process in the former case as in the latter, I venture to offer you a few remarks upon a subject closely connected with mental culture. That subject is the new orthography. It has been demonstrated that the reform proposed in the English alphabet very much abridges and simplifies the labor of learning to read and write. The greatest, and perhaps the only real objection to the phonetic alphabet is, that it is not yet introduced into general use, which objection applies, from the nature of things, to all reforms before their common adoption. This, like other true reforms, needs assistance in its infancy, and who can more effectually render this assistance than the man of the press? To come to the point aimed at then, your humble correspondent asks the proprietors of the Farmer that they will, if convenient with their interests, give

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the phonetic alphabet a trial. By laying before your readers once a month a few paragraphs in the new method of spelling—a task to which you will be equal when supplied with a few of the types, and Mr. Smaley's Phonetic Dictionary—you will no doubt highly gratify many who are now phoneticians, and many more who will speedily become such by reading those paragraphs, without, I think, displeasing any reader. And while thus supporting a worthy cause, you will do much to draw upon you the gratitude "Of nations yet to be."

Truly yours, A JUNIOR.

In relation to the foregoing subject we would say, that it is one which we do not very well understand, but will consider it, and if desired by enough of our readers to make it worth while, perhaps when convenient will adopt the suggestion.

EDS. FARMER.

For the Farmer.

SMUT IN WHEAT.

MESSRS. EDITORS—I notice in the April number of the FARMER, 1855, on page 100, an article on Smut in Wheat, in which the writer, Horace Clemens, recommends vitriol as a remedy. I shall not attempt to dispute the point that smut in wheat is a disease, as I believe the same to be an acknowledged fact. But as I have ever, in regard to all diseases, considered an ounce of preventive equal to a pound of cure, I have therefore from careful investigation become satisfied that the most fruitful source of smut is the heating of the seed in the mow. With this view, my preventive for some years past has been, to let my wheat for seed stand until quite ripe before cutting, and then I advise to put the same on a scaffold until fully cured.

Since I have practiced this mode of saving seed, I have had no smut in my wheat, although my neighbors complain of their wheat smutting. Yours truly,

LYMAN DAYTON.

DAYTON, WAUPACA Co., Wis., May 5, '56.

ANOTHER REMEDY.—While traveling in Waukesha County a short time since, Mr. WM. GRAVES, of Lisbon, gave us the following preventive or remedy, which he said he had tried with entire success for several years—never having a bit of smut when following the course given below:

Just before sowing wet the seed thoroughly with weak ley, then roll in dry ashes and sow immediatly.

Care must be taken not to have the ley too strong or the germ of the seed will be injured.

In the Farmer's Dictionary we find smut in wheat spoken of as follows:

"The best preventives known are to keep the lands occasionally limed or salted, never using too much rank stable manure without some saline matters; and, secondly, steeping the seed before sowing in solution of *sulphate of copper* (blue vitriol.) One ounce and a quarter of the salt is used to a bushel of wheat: it is dissolved in just enough water to wet the grain, which is steeped for three quarters of an hour, and dried by being spread out. A strong brine and milk of lime are also used with good success; but the copper solution is very superior."

VALUABLE FACTS IN CHEMISTRY.

Acids and alkalies are to each other like negative and positive, and when mixed in equal proportions neutralize each other, and when neutralized are in equal proportions.

Acids change blue, purple and green colors of vegetables into red; and neutralize alkalies and earth. The elementary principle is oxygen. There are eighteen mineral acids, nine vegetable, and five animal.

Alkalies have the power of changing the blue vegetable juices to green, the green to yellow, the yellow to orange, the orange to red, and red to purple. Acids change vegetable blue to red. Chlorine destroys all colors.

Alkalies consist of ammonia, potash, soda, and lithia. The alkaline earths are lime, magnesia, barytes, and strontian. The neutral earths are silica, alumnia, ytria, glucina, and zirconia.

100 of pure potash are equal to 70 of concentrated sulphuric acid, and thus they are mutual tests.

Ammonia is a compound of hydrogen and nitrogen, and usually called volatile alkali. Davy, after galvanizing soda and potash, made an experiment to prove that there was oxygen in ammonia.

Davy, by compounding the galvanic elements with these alkaline earths, made substances which he called metals, as calcium, from lime, magnium, barium, and strontium. These from their earthy base proved heavier than the alkaline metals.

Bone in its solid parts is phosphate of lime organized by membranes, arteries, veins, lymphatics, and nerves, and in a state of

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constant change, like the rest of the body. Madder in food stains bones, and abstinence restores them, and the vessels so rapidly convey the matter of the bone, that in cases of necrosis or death of a bone, a new bone is formed as a case to the dead one, which may be taken away when the case becomes a perfect bone in all its functions.

Chlorine gas destroys the volatile effluvia of putrefaction and infection; and a solution of the chloride of lime is bleaching powder, and employed for that purpose. A table spoonful, in a wine glass of water, spread on a plate, destroys all infection, and purifies the air of sick chambers, infected houses, and removes smells from drains, privies, &c.

THE INSANITY OF WEALTH.

Every century of the world's progress has had its foible and its predominant characteristic. One was measured by barbarian conquest, another witnessed the spread of Christianity, a third was memorable for the crusades, a fourth for its feudal sway, another for its spread of superstition, another was an era of conquest, another of discovery, another of settlement, etc. We have had the iron, brazen, silver, and golden ages; but, beyond all question, the mark of this nineteenth century is expressed by its pursuit of wealth more than by any other of its great characteristics. The pursuit in England and in the United States has been to a great degree an insanity. Previous to 1825 men labored for competencies—from then to 1835 for fortunes—ever since for the love of monnyed power and pecuniary despotism; and despite all the dreadful lessons we have from day to day, and year to year, regarding this insanity, the pursuit continues and increases its tenacity of purpose and scope and sway. Suicides, bankruptcies, disgraces, sudden deaths—one and all preach awful sermons to the votaries of wealth, yet how pointless of effect! Men make steam-engines of themselves, and from morning until night—even half through the night—work and dream of gold.

"Gold! Gold! Gold! Gold!
Bright and yellow, hard and cold—
Molten, graven, hammered, and rolled,
Heavy to get and light to hold—
Hoarded, bartered, bought and sold—
Stolen, borrowed, squandered, doled—
Spurned by the young, but hugged by the old
To the very verge of the church-yard mould—
Price of many a crime untold;
Gold! Gold! Gold! Gold!
Good or bad a thousand fold!"

A Wall Street cotemporaty actually finds room right under its "stock column" for this paragraph:

"THE SUDDEN DEATH OF NELSON ROBINSON, ESQ., who is well known to New York city as one of the leading minds of Wall St., forcibly arrests the public attention. Twelve o'clock Sunday, we understand, he was at church, in his usual health. On his return home he was seized with apoplexy—the second attack—and he expired after an illness of six hours.

"These (many) sudden deaths from apoplexy among business men, forcibly admonish us all that we must take more time for leisure, recreation, and enjoyment of some kind or other. Mind cannot stand the constant stretch of the street, and breaks down under it, and crushes the whole system with it. The brain is *over*-worked, and the physique *under*-worked. There is not enough *physical* to counterbalance the intense intellectual activity of the city. Play more and work less."

Here was a gentleman in the prime of life—only forty-eight years old—with an income of $50,000 a year for the last ten years probably, living in grand style, with a loving wife and family, who committed suicide just as much as Sadlier did on Hampstead Heath, through the insanity for wealth—only the insanity of one ended in misfortune and that of the other in lucky turns. He retired in 1854, and was then told by his medical friend: "Stop business, or you will die!" He obeyed for a short time, and was renewing his youth and life; but yielding to the insanity of Wall Street, he re-entered the race for wealth, *and died.*

It was the insanity for wealth which drove Robert Scuyler and James C. Forsyth to the miserable deaths of skulking exiles; and it is the same which has brought Phineas T. Barnum to the mortification of a public bankruptcy, and an examination in open court about his his daily bread.

These are lessons which men grasping for wealth *may* profit by; but the probability is that they will be scorned. It is the property of insanity to believe its possessor sane, cool, and steady, and in no need of reformation in mind or body; but the humble artisan, the merchant of sung means, the happy *literateur*, the merry miller, the little laborer, the hearty farmer—one and all, who ever sigh for wealth, and often fain would essay to try for the gigantic fortunes that they hear about, *will* take heed of these teachings and ask only for competency—remain contented with competency when it is acquired. For them, the warnings of suicide, bankruptcy, disgrace, and sudden death will not be thrown away. [N. Y. Sunday Times.

CORNS.—If you don't want corns on your feet, don't wear tight boots. If you don't want to be 'corned' all over, don't get 'tight' yourself.

WHY had a man better loose an arm than a leg? Because in losing his leg he loses something "to boot."

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For the Farmer.

TIMBER GROWING.

MESSRS. EDITORS—I had hoped before this to have sent you a few thoughts on timber growing, but hitherto have been hindered. I am glad that others are attending to the subject, yet there is one part of the business, to my mind, overlooked. It is this—most men are unacquainted with nursery work, practically; and the seasons hurry farmers so much in this country, that I fear but little will be done in timber raising until practical nurserymen set about the business in earnest, and raise and advertise timber trees as abundantly and cheaply as they now do apple trees.

I have observed here that young oaks mostly lose their leading shoot in the winter, and start another in the spring; (this I suppose to be occasionnd by a late fall growth, and the hard frost,) and it is very detrimental to the growth of the tr e, and also to the timber, causing many more knots and crooks. Great difficulty was experienced in England, some years ago, in raising clean, straight oak timber in many parts, until a plan was adopted to plant amongst the oaks about an equal number of selected Scotch fir trees, or rather pines, (*Pinus Sylvestris*,) which grows 80 feet high. and will keep above the oaks, and protect them, thus facilitating their growth. As they progress they require thinning out —first in the branches, and when they have attained 15 or 20 feet hight, an annual thinning is necessary, which will furnish a great deal of useful stuff. Finally the pine trees may all be cut out, excepting a few on the outside of the copse or plantation, which will help to break the wind, and make a pleasing variety of foliage. Some of the most valuable forests of oak timber owned by Queen Victoria, have been raised and nursed in this way, as I am witness.

Larvix Europea has also been cultivated to great advantage in England, for various in-door uses, and has been found very durable and strong. It is sometimes raised for h p poles; for this use they need to be planted almost as thick together as is possible. No doubt a selection from 20 or more American varieties of Pinus, Abies, and Larvix, might be made which would at once beautify and enrich our Wisconsin; but the nurseryman must make the choice, and prepare them for the farmer, as all the resinous trees require to be bedded out from the seed box, bed, or pot in which they have been raised, when very small, and must be transplanted every ye r, or two at most, until sold from the nursery, or else the buyer will lose his labor and his money.

As a shade and ornamental tree, I know of none that surpasses the Horse Chestnut, (*Aesculus Hippocastanum*,) and Paria Discolor—one growing 50 feet high, the other from 5 to 10 feet. A. G. Hanford will confer a benefit on the readers of the FARMER if he can tell them how readily to distinguish between the Black and Yellow Locusts, and give the botanical name of the species as there are many varieties.

JOHN W. FORD.

BERRY, May, 1856.

For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—Your remarks in the April number, upon the communication of Mr. Hatch, in relation to the transmutation of wheat to chess, are indicative of a slight degree of impatience with those who find faith a shorter road than reason, even in physics. In this matter you can say with more propriety than did the prophet in a different case, "I do well to be angry." It appears to me that no evidence, short of that which is "strong as proofs of holy writ," should be accepted in favor of a proposition which has no analogy in nature, and no plausibility in reason. I am aware that one well proved fact is worth a score of arguments, but in this case the fact is always assumed, and never proved but by hypothesis or second hand testimony.

It is true that many credible men tell us of sowing wheat and reaping chess, but who of all these trust-worthy believers has ever made such an experiment as a scientific man would demand, and found his theory justified by the fact? Or, who has sown wheat where no other seed could possibly have been in the soil, and after subjecting it to all the conditions favorable to transmutation has found chess where wheat should have been?

I have said that this process of transmutation has no analogy in nature. Wheat, (*Triticum sativum*,) and chess, or cheat,

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(*Bromus secalinus.*) are both perfect plants, capable of re-producing their kind, and having no other resemblance than is common to all plants of the same general family, but differing in species and varietes. The Lima bean of our gardens, the red clover of our fields, and the yellow locust of our forests, are more nearly allied than wheat and chess.

The potato, the egg-plant and the tomato, are nearer congenus than these cereals, and yet who would credit the story that either of these edibles had grown from the seed or root of the other? Admit the possibility of such a change as this, and the integrity of nature is destroyed, and the whole animal and vegetable kingdoms would long ere this have been in a state of hopeless confusion. If chess is degenerate wheat, as some contend, the infallible law of nature must apply to this as to all hybrids, forbidding its reproduction, and yet chess will produce chess as certainly as like produces like in any other case.

In short, I am more inclined to the opinion that, if transmutation is ever possible, our wheat has for years past been turning to *pigeon grass*, as that enterprising cereal has multiplied mysteriously in our lands.

D. WORTHINGTON.

Summit, April 25, '56.

For the Farmer

PLOWING WITH THREE HORSES.

Few farmers are aware of the advantage of plowing with three horses, instead of using only two, as is the common method. For breaking in colts, particularly, this is a very practicable method. A colt may be placed on the near side of a span of horses, making him pull on the end of a sweep, against the span—on the principle of a steelyard, the length to be proportioned according to the strength and endurance of the colt. The team moves steadily along in spite of the unsteady movement of the colt. To prevent the plow from running too much to land, the clevy will have to be placed far to the near side—or, better yet, a plow beam sprung sufficiently to the near side substituted for the old one. In harrowing, also, a much greater amount of work may be done than with only two horses. The three horse team gives a power and steadiness of movement truly surprising to those who have never tried such a team before.

For the Farmer.

ARTESIAN WELLS.

MESSRS. EDITORS—In looking over your valuable publication, my attention was arrested by a communication asking for information in relation to Artesian Wells. I am engaged in that business, and will give you all the information in my power. Wells of four or six inches diameter can be sunk for from one to three dollars per foot. If in earth, you will need a pipe of iron, and then your well will average about three dollars per foot; if in rock, the cost per foot will not exceed $1.50—if in lime or sandstone; harder rock will cost more. Water can be brought to the surface of the earth in any part of the country, by going deep enough; but there has as yet been no rule discovered by which to determine the depth you must go to accomplish this object. I can sink 4, 6, 8, 10, or 12 inch wells to any depth required. I will furnish a set of tools capable of sinking wells 300 feet deep, and men to work said tools, for $12 per day, and found; or sell a set of tools that will work 300 feet, with derrick, gearing, drills, and augers suitable for earth or stone, for $850, and give all necessary instruction how to work them. I shall be happy at any time to give you any information in my power, and subscribe myself, very truly

Yours, EDWIN R. PIERCE.

WYOCENA, Columbia Co., Wis.

SILK FROM THE MULBERRY TREE.

The Paris correspondent of the London Atlas gives an account of a discovery said to have been recently made in France, by Alphonse Karr, which is nothing less than the manufacture of silk from the mulberry tree. This tree furnishes the food of the silk worm, and this discovery is intended to take the entire business out of the hands of this creature. It is stated that the mulberry leaves are boiled first into a thick paste, from which the silk threads are made. The correspondent alluded to states that he has seen several yards of excellent silk, made in this manner, and that its price is twenty-five times cheaper than silk made in the common way. We are inclined to doubt the truth of this story; but we hope it may be true.

[Scientific American.

"I can hardly think that man to be in his right mind," said Cicero, "who is destitute of religion."

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HORTICULTURE.

FRUIT TREES AND THEIR ENEMIES.

June, though not so busy a planting season as April and May, yet affords plenty of employment, both in the fruit and vegetable garden. Trees of last spring's planting need looking carefully over, to see that they all stand firm and erect in their places; and also that the mulching is properly placed about them, before the setting in of the dry hot season.

Look sharply for Borers in the bodies of your apple trees. Whenever you see dark, scabby, dead looking spots on the bark, take your knife and carefully examine for the cause. You will frequently find it the locality of the Borer. Underneath the bark, insidiously, but rapidly, he pursues his destructive work. He is but an insignificant white grub, yet armed with a rasp upon his head, that readily reduces the hardest apple-tree wood to powder. We set a fine garden orchard, two years ago the past spring, of large selected trees, that we went more than a hundred miles to get. For a while they seemed to grow well, but about mid-summer, we discovered some of them beginning to wilt, and look sickly; on a little examination we found them badly infested with Borers—some of them even entirely girdled, and dying, others scarred and partly girdled. We immediately set to work with a slim pointed knife, and dug the rascals out; but they had got so well started, that at least one half of the trees were entirely spoiled.

The only remedy we know of, is to watch for, and slay them when they appear. And the earlier the examination in the spring the better. Digging round the trees, as soon as the frost is out of the ground, and mixing in plenty of unleached ashes, or air slaked lime, to kill or drive away the insect from which the Borer originates, is also recommended as an excellent preventive of the evil in the premises. Hickory, cut at certain seasons of the year, is much infested with the borer; and we are inclined to believe that they went from hickory stumps standing near, into our trees, especially as they were brought and set there, upon an entirely new patch of ground, but a few weeks before. We have since been shy of dead hickory, about our orchards, and would advise o hers to be.

The *Aphis Mali Fabricius*, or Plant Louse, is one of the next plagues in order, upon apple trees. They are described as follows, in Fessenden's Practical Gardener;

"This genus of insects comprises many species and varieties, which are so denominated from the plants they infest. The males are winged, and the females without wings; they are viviparous, producing their young alive, in the spring; and also oviparous, laying eggs in autumn."

A writer for "The New England Farmer," (Vol. III. p. 9,) after stating a number of experiments with soap-suds, for detsroying aphides, which were unsuccessful, or but partially succeeded, says, "I was led to conclude, that it is not sufficient to wet the upper side of the leaves, thinking to make them disagreeable or poisonous to the insect, but that they must be well drenched or immersed in the suds. I therefore applied again the same remedy; but with this difference—instead of sprinkling the upper side of the branches, I carried a pailful of suds from tree, to tree, and, bending the tops of small trees, and the branches of larger ones, immersed all the parts infested with lice, holding them in the liquor for a moment, that none might escape being well wet. On examining the trees, the next day, the greater part of the lice were destroyed. It was found necessary to repeat the same process once or twice, with suds not too weak, say about two or three ounces of soap to a gallon of water." Another writer in the same paper, (p. 10,) says, "I have applied soap-suds to my apple-trees, in order to kill the lice. It will be sufficient for me to say, that just sprinkling them with suds will not kill them; neither will dipping the branches which are infested with them kill them. But dipping and holding them in, as long as I can conveniently hold my breath, will destroy every one. The suds do not appear to injure the leaves. I tried suds made on purpose, and suds which had been used for family washing. The latter answers the purpose much the best." It is possible to make soap-suds so strong as to kill the tender branches, as well as the insects which infest them. The proportion above mentioned, of two or three ounces of soap to a gallon of water, is probably most advisable.

The Caterpillar is also a great nuisance, if allowed to multiply and mature on orchard trees. We never see worms' nests upon a neighbor's trees, remaining perhaps for weeks, without concluding that he is too negligent and careless to have an orchard

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under his charge. The following remarks from Coxe are in point:

"This is one of the worst enemies to an orchard when neglected; but easily destroyed by a little attention. In the spring, when the nests are small and the insects young and tender, they never venture abroad in the early part of the day, when the dew is on the trees, or in bad weather; they may then be effectually destroyed by crushing them in the nest. This attention, continued a short time every spring, will destroy those in existence, and will prevent their increase in future years: if left till grown strong, they wander from their nests, and cannot be effectually overcome without great trouble and expense."

We shall make a more extended reference to the various destructives of fruit and fruit trees during the season, accompanied with full illustrations, deeming it a subject of sufficient importance to be well studied and fully understood.

THE WINTER AND ITS EFFECTS.

The effects of the cold winter upon fruit trees, are at length fully determined and understood, and we think will be remembered for some time by not a few. The peach trees seem to have been nearly all destroyed, throughout the State, and all the more tender kinds of cherry trees are killed down, partially or wholly. Young apple trees, in many instances, have fared but little better. Of a lot of about six hundred which we had set in nursery rows, coming five years old, we have lost about one third, outright, while many of the others have had all the growth of last year killed. We attribute it in part to their being imported trees, having been brought up from Rochester, N. Y., last spring. They were a scurvy lot of trees, like most that come up from those eastern nurseries; and being out of the ground so long, as they must necessarily be on so long a journey, they were partially stunted in their growth, and consequently were as illy able to stand a very cold winter as a consumptive patient would be.

We fared about the same with our pears, especially those dwarfed on quince. The Bartlett variety, both on pear and quince, killed out bad. Still, all trees that lived through, although pretty black inside for a time, are now growing well.

For the Farmer.

STRAWBERRIES AND PIE TIMBER.

MESSRS. EDITORS—Why do we see so little attention given to small fruit and the luxuries of the garden? We herewith send you a statement of our past season's success in strawberries, copied from a previously prepared journal:

From 28 square rods actual measurement, we have picked and sold at home market, 237 qts. of strawberries, clear fruit, at 2s. per qt.; also 150 qts. in the calyx. at 1s. 6d. per qt.—used 38 qts. at 2s per qt., making in all, 425 qts., amounting to $94.38. At the same rate, *one acre* would produce over 75 bushels, amounting to nearly $600.

The kinds cultivated in these beds are the Willey, and Large Early Scarlet. Some square rods of our beds yielded more than twice as much as others, giving some idea of the amount that may be grown on an acre of ground. The mode of culture is well described in the April number of the FARMER, in "a Chapter on Small Fruit."

We have one-fourth of an acre of Pie Plant, (Cahoon's Seedling,) which has yielded and we have sold $200 *worth of the stalk for pies, in this market, this season.*

These items may encourage others to try the "no-matter luxuries" of the garden.

GEO. J. & S. H. KELLOGG.

JANESVILLE, May, 1856.

THE CRANBERRY AND ITS CULTURE.

The above is the title of another manuel, from C. M. Saxton & Co., New York, written by B. Eastwood, very well illustrated, and full of information. The culture of this fruit is of great importance; it will pay well in soils suitable for little else. A large demand, even for export, has grown up, and, from the easy transportation of the fruit, it is very profitable. The experience detailed in this work cannot be dispensed with by those intending to plant the cranberry. From ten to fifteen dollars a barrel is the price now obtained in the Boston market; a pint has been sold in London for nearly a dollar; all that can be raised will find a market. In the appendix, there is an estimate of the profit of the culture, by Mr. A. Flint, as follows: In 1853, he sold fifty barrels, at thirteen dollars a barrel, making *six hundred and fifty dollars* as the product of two acres of what was quite recently an almost worthless bog meadow. [Horticulturist.

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CULTIVATION OF PLUMS.

In most sections the cultivation of plums has been greatly abridged by the ravages of the curculio, and indeed the injurious consequences resulting from its insidious attacks, have been so great, that very many who had entered quite extensively into the enrerprise have been compelled to abandon it altogether. Whether there exists, at present, any efficient and reliable remedy for this evil, is a question admitting, perhaps, of some doubt. Still, by a proper system of cultivation, its effects may be greatly mitigated, certainly, and the farmer who is the possessor of suitable soil, and who can afford the requisite amount of attention, may derive no small profit from the cultivation of any or all the numerous varieties ordinarily grown upon our farms. The soil which appears to be most genial to these fruits, is a light, deep and warm loam, approaching to sand, and reposing upon a porous substance of sand or gravel. It should be worked carefully, and enriched by durable manure, but never with such matters as will ferment strongly. A compost of forest leaves, clay and rotten wood, chip manure from the wood shed, leached ashes, lime, gypsum, and *salt*, is much better than animal excrement, and if thrown into a heap the year previous to its application, and occasionally wet down with soap suds and urine, with a turning now and then during the season, to mix the materials thoroughly, it will operate with great efficiency, and induce a rapid and healthy growth.

Salt is perhaps one of the best of all known fertilizers for the plum. In its native state —that of the beach plum—it is always found in situations where it is copiously irrigated by salt-water, and is there never infested by the evils which so greatly lessen its value in a cultivated state. Probably an occasional sprinkling of salt and water, made about as strong as the sea water is, and applied by an ordinary garden syringe, to the limbs and leaves, would tend somewhat to mitigate the evils resulting from the curculio, if it did not wholly prevent them. Washing the bark frequently with soap suds, urine, or weak lye, and splitting the bark from the roots upward to the junction of the larger limbs, have a good effect. All green and immature fruit should be carefully destroyed as soon as it falls. It contains the egg of the fly which produces the curculio, as may be seen by inspecting it as it comes from the tree.

I think that very many who attempt the cultivation of plums, are enforcing them too vigorously. The pear blight, in my opinion, is attributable to the same course. In old times, when pears were set in apple orchards, there was no complaint as to their blighting. The disease was, indeed, wholly unknown, and has only been developed of late years, when it is thought that the forcing principle, so perniciously applied in our human "nurseries of knowledge," is equally desirable in accelerating the maturation of vegetables, and pushing "Dame Nature," ahead of herself, to the detriment of her more important characteristics and powers.

J. B. B. in the Germantown Telegraph.

CURRANTS.

The "Victoria" is a great improvement upon the old Red Dutch; bears profusely—bunches long, and berries large, and a robust grower; it should be in every garden. The Cherry Currant has shorter bunches than the Victoria, but much larger berries, and is a little more acid. The size of its berry is remarked by all who see it. The Red Grape is also a very productive variety, the bunches are very numerous, and berries not so large as those of the Cherry or Victoria.

Long Bunched Red is a very desirable variety, and is remarkable for the length of the bunches.

Prince Albert is a very light colored red currant, a very choice variety, but as yet not so extensively cultivated as the sorts above noted.

Among the white currants, the White Grape is becoming the general favorite. Those who compare it with the White Dutch are obliged to acknowledge its superiority, both in size of berry, productiveness and flavor; it is much sweeter than the other, and is peculiarly adapted to making wine. The Currant requires little special attention, a few bushes will not occupy much space along the walk in a vegetable garden, while their fruit is very grateful in the sultry weather of August. Let all who own even a small garden, procure a few of these improved varieties of Currants. [Rural New-Yorker.

BUSH YOUR TOMATOES.—It is just as sensible to grow peas without bushing them as it is tomatoes. You may grow both in a slovenly sort of way, if you have plenty of room on the ground; but you can grow either twice as well upon something to support them, and tomatoes are decidedly better grown up in the air than near the ground, under the shade of a mass of vines. The best support for a tomato vine is a short bush set firmly in the ground. The branches have room to spread among the limbs and support the fruit. The plan is much better than tying to stakes and trimming, according to our experience. We have tried both ways. [Agricultural Exchange.

PUNCH thinks that carriage drivers would make the best soldiers in the world, as no troops could stand their charges.

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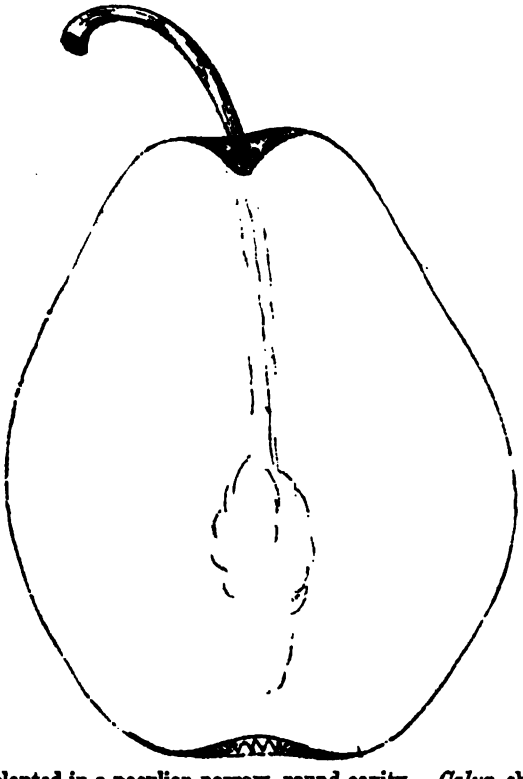
PEARS—FLEMISH BEAUTY.

We give two outlines of Pears—the Flemish Beauty, and the Beurre d' Anjou—the first of which we deem one of the very best for western cultivation, as a standard tree. The Wisconsin Fruit Grower's Association recommended it for general cultivation, at their late convention. The other is also highly spoken of, although not so well known and proved as the first.



"The Flemish Beauty seems particularly well adapted to the rich warm soils of the West, producing fruit with only ordinary care, equalling specimens grown East by means of special nurture and extra attention. The best specimens we have ever seen were grown in Wisconsin. 'The tree is very luxuriant, and bears early and abundantly; young shoots upright, dark brown. The fruit requires to be gathered sooner than most pears, even before it parts readily from the tree. If it is then ripened in the house it is always fine, while, if allowed to mature on the tree, it usually becomes soft, flavorless, and soon decays.

Fruit, large, oblong, obovate—*Skin*, a little rough, ground pale yellow, mostly covered with marblings and patches of light russet, becoming reddish brown at maturity on the sunny side. *Stalk*, rather short, from an inch to an inch and a half long, pretty deeply planted in a peculiar, narrow, round cavity. *Calyx*, short, open, placed in a small round basin. *Flesh*, yellowish white, not very fine grained, but juicy, melting, very saccharine and rich, with a slight musky flavor. *Season*, 20th September to 15th October."

We had selected a somewhat lengthy article for this number, bearing upon Dwarf Pears, and calculated to establish some things we have said about them heretofore; but want of space forbids it for the present. It will make no particular difference just at the present, as the Pear speculation must be nearly over, for the season, before the appearance of this number. We think the subject will be likely to be pretty well understood, by many, after the experience of the past winter.

To Destroy Bark Lice.—Take strong lye, and put in it as much salt as will dissolve, and wash the bark of the trees with it by means of a brush or swab. Apply in spring before the buds start.

Soil for Fruit Trees.—Fine fruit can only be grown upon a soil naturally or artificially dry and firm. A wet soil, or a very loose, peaty one, never produces fine fruit. Sandy soils, gravelly soils or clayey soils, as well as what are called loamy soils, can be made to grow fine fruit, if properly cultivated, provided the subsoil is porous enough to permit the water to escape rapidly downwards a sufficient depth to allow the roots of trees at least three feet of soil which is never filled with stagnant moisture—and the greater the depth of perfectly drained soil, the greater the certainty of success.

[Moore's Rural New-Yorker.

Nature makes us poor only when we want necessaries, but custom gives the name of poverty to the want of superfluities.

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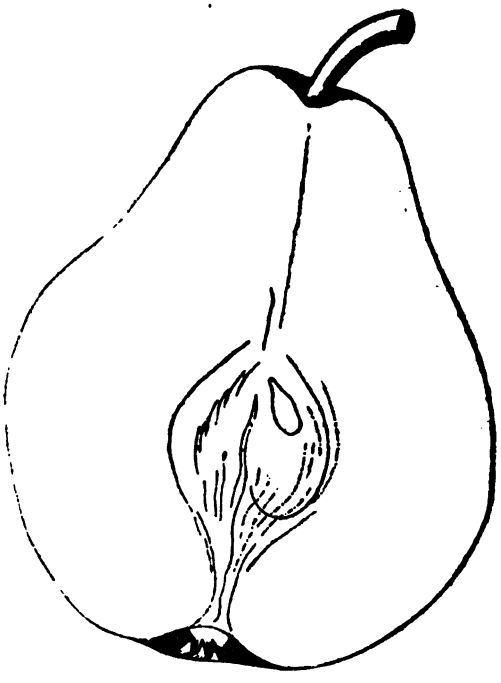
PEARS—BEURRE D'ANJOU.

"This variety was imported from France, and is comparatively new at the West. The vigorous and healthy character of the tree, together with its habit of early and abundant fruiting, we think warrants its extended culture. The wood is stout and of a pale dull yellow.



Size, large. *Form*, oblong-obovate, full at the crown, tapering to an obtuse point at the stem. *Color*, pale yellow, dull red on the sunny side, much russeted around the eye, and regularly covered with minute russet specks. *Stem*, short, thick, curved and obliquely inserted in a shallow cavity, formed by uneven swellings and projections of the fruit. *Calyx*, medium sized, open with stout segments reflexed. *Basin*, regularly formed, round. *Flesh*, yellowish white, melting juicy, rich, sprightly and delicious. *Core*. small. *Seeds*, long, pointed. *Season*, October and November."

The Benrre d' Anjou is sometimes confounded with the Beurre Brown. Downing describes the latter variety as follows:

"THE BEURRE BROWN, almost too well known to need description, was for a long time considered the prince of pears in France, its native country, and for those who are partial to the high vinous flavor—a rich mingling of sweet and acid—it has, still, few competitors. It is, however, quite variable in different soils, and its variety of appearance in different gardens, has given rise to the many names, gray, brown, red and golden, under which it is known.

"Kenrick calls it "an outcast," but our readers will pardon our dissent from this opinion, while we have the fact in mind, of its general excellence in this region; and especially that of a noble tree, now in view from the library where we write, which is in luxuriant vigor, and gives us, annually, from five to eight bushels of superb fruit. The truth is, this pear is rather tender for New England, and requires a warm climate and strong soil. Shoots diverging, dark brown.

"Fruit large, oblong-obovate, tapering convexly quite to the stalk. Skin slightly rough, yellowish-green, but nearly covered with thin russet, often a little reddish brown on one side. Stalk from one to one and a half inches long, stout at its junction with the tree, and thickening obliquely into the fruit. Calyx nearly closed in a shallow basin. Flesh greenish white, melting, buttery, extremely juicy, with a rich sub-acid flavor. Season, September."

SOURCE OF THE CARBON OF PLANTS.—Plants derive their carbon from carbonic-acid, most of which they absorb from the air thro' the medium of the leaves. It also comes in through the medium of the roots dissolved in water. It was long supposed to be derived from the vegetable mould (*humus*) of the soil, which got into the plant before complete decomposition; but this opinion is now mostly abandoned.

A SMILE.—Day begins in darkness, grows bright, strong and glorious, and in darkness closes; and so man commences life in weak childhood, attains the meridian of manhood, and in second childhood ends his day career.

AS THE small planets are nearest the sun, so are little children nearest to God.

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TRANSPLANTING EVERGREENS.

The following extract, from the recently published volume of Transactions of the Illinois State Agricultural Society, from the pen of J. C. Brayton, Esq., strikes us as particularly sound and practical in its character, and seasonable at this time for the lovers of evergreens, in Wisconsin as well as Illinois. We commend it to the careful perusal of those who would add this most beautiful of all contrasting ornaments to their landscape scenery. His recommendation of native varieties in the main, in preference to those of foreign growth and doubtful hardihood, is in exact accordance with our own judgment and experience.

Then, again, the peculiar and delicate character of evergreens under removal and domestication, should fully admonish all not to throw away their money upon uncertain trees, at uncertain seasons of the year, and in uncertain hands, when the only probable certainty is that they will die out on your hands. Our own advice to all who can is to cultivate evergreens, by all means, but to do it in the right way, and in no other:

"Dear Doctor—In looking for a subject with which to comply with your invitation to write an article for your forthcoming vol. of Transactions, I could think of none more likely to be of use to the cultivators of the soil of your beautiful prairie State, than that of successfully removing evergreens to it, where I know they appear more in place, and are more attractive than anywhere else perhaps. Our native species have proved not only more hardy, but more attractive than a majority of those introduced from foreign lands. My own experience being principally with these, I shall embody the results of my own experiments, in removing and transplanting them, in the shape of directions for the guidance of others.

Here I feel inclined to add that our native spruce (Abies Nigra) is more ornamental than the famed Norway, and this opinion is shared by other cultivators, who have both in this State.

BLACK OR DOUBLE SPRUCE, (*Abies Nigra.*)

This tree closes its growth here, and in its natural situation north, before the 10th of July. It may rarely make a second growth, but if it does, we have not detected it. Young trees from the forest should be removed the last twenty days of July. Care must be taken in selecting, as nine-tenths of those found growing are natural layers; and not more than one in five of these is worth taking away, from deficiency in roots. If they are removed early, they lose their foliage in the spring months; and when so removed it is all lost at one time, in consequence of the check given to the flowing sap, and is not often renewed. The same difficulty is experienced in removing in the fall, and heeling in for the winter, the foliage all shells off in the spring in handling, and cannot, except rarely, be coaxed into a renewal.

The smallest plants are best for removal; though we have planted those averaging eighteen inches, the 10th of July, which were not carefully selected—being nearly all layers—of which the loss was fifty per cent; another lot the last week in July, and a better selection, loss forty per cent.

Seeds do not often germinate the first year. Time of gathering them, September.

BALSAM—BALSAM SPRUCE, (*Abies Balsamea.*)

Re-produces itself mostly from seed. Very small plants of these may be obtained far north, in this State and in Michigan. And these small plants are best for removal, as well as safest. Are best, because when transplanted they produce branches from the ground; and the same is true of all varieties taken from the forest, or from any shaded situation.

Growth commences about the same time as deciduous trees, and continues about six weeks: from the 20th of May to the last of June here. It may be successfully removed at the time of the commencement, though safer after growth is closed—from the first of July to the middle of August—later, they do not get sufficiently established before winter, unless very deeply and thoroughly mulched. During this period scarcely any losses occur, except a portion of those deficient in roots. We do not shade the balsam here; but mulch thoroughly. Shading may however be well south.

Seed is apt to be blasted, if it is not, it germinates the first year. Time of gathering, August; later, the opened cones will have parted with all of it; when it is not easily gathered up.

WHITE PINE--WEYMOUTH PINE, (*Pinus Strobus.*)

With the pines, we have had no success in spring planting; but the best success with a small lot planted the last half of July, although the growth had not entirely closed for the season. From present knowledge we would choose the month of August for their removal. They are more irregular in the time of closing their growth than the balsam or spruce; but generally stop growing about or before the first of August, here.

Cones should be gathered early in September, when the squirrels begin to drop them off, to carry away to winter quarters. Then the gatherer, by approaching those trees,

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where the red squirrel is engaged in dropping, may pick them up as fast as dropped; and by withdrawing when the squirrel is observed to be coming down, can use him the second or third time, if he finds no cones to carry away on his descent; as he will immediately re-ascend, and re-commence plucking with a hearty good will, until the *thief* is discovered.

We have planted the cones in June; part of the seed germinating in about two weeks.

ARBOR VITÆ, (*Thuja Occidentalis.*)

These may be successfully removed in July or August. And we have been successful in October, heeling in and planting out in the spring. They do not become defoliated like the foregoing. Is mostly re-produced from seed, although natural layers are by no means rare; but are worthless for removal, having but few side roots.

The seeds must be gathered early in August. Cones very small are obtained by climbing the trees. They germinate soon after planting, without any preparation, and are much more easily raised from seed than any other variety which we have tried.

RED CEDAR, (*Juniperus Virginiana.*)

Of this variety we shall not say much, not having noticed particularly its season of growth, and knowing it also to be a native of Illinois. We have not succeeded well in transplanting except early in May. When received among four lots of arbor vitæ and balsam, in summer, it seemed to be in a state of growth in mid-summer, and did not succeed to satisfaction.

Our opinion is, that early spring is the safest time for their removal. The berries must be gathered early in October. Later, the cedar bird will have appropriated the crop. The pistillate trees, only, produce berries; mix them with sand and bury until the second spring.

For a seed bed for any kind of evergreen tree, shelter must be prepared for the first season. We make a shelter over the bed by driving crotches three feet above the ground and laying across poles, which are covered with a thick layer of branches, with the foliage adhering. But where a thicket is not convenient, a cloth tent, with the eaves raised about one foot above the ground, would be preferable to any other mode of sheltering; the sun's rays being intercepted, but not entirely reflected, by thin cotton cloth.

The watering should be done by hand, in preference to depending on showers, dripping from boards, or any other medium. A shower from a watering-pot, twice a week, is sufficient during the early part of summer; and once a week later.

In a bed twelve feet square several thousand seedlings may be raised, until transplanting time the second year.

For mulching, saw-dust is perhaps preferable to any other substance, if attainable. We use about three-fourths of an inch in depth, on newly transplanted trees, and do not renew it the second year, though the plants would not be injured thereby. Chaff would doubtless be good, if not in too exposed a situation, where the wind would take it away. Straw and other coarse litter does not lie sufficiently close to the plants, without much care in placing and confining it to its place. Chopped straw would doubtless prove unexceptionable, if not too expensive.

But no care in planting out is sufficient, if the taking from the forest and packing for removal have been carelessly performed, as is too apt to be the case with those who go to the pineries to obtain plants for the southern market. A small rate per thousand being anticipated, the *scrabble* is rather to carry away a large number than to pack only such as will be sure to grow. If the latter object prevails, more than half of those taken up will be rejected, for want of roots. Those taken up must from the moment be shielded from the sun and drying, otherwise evergreen roots are hopelessly *done for*, almost in a moment."

FLOWERS, ORNAMENTAL.

Should the agriculturist have no taste for ornamental gardening, yet such is the laudable taste of the fair daughters of America, at the present day, that there are but comparatively few, that do not take an interest in a flower garden. And this alone is sufficient reason for the publication of these remarks.

Horticulture, as it respects ornamental gardening, is one of the most innocent, the most healthy, and, to some, the most pleasing employment in life. The rural scenes which it affords are instructive lessons, tending to moral and social virtue; teaching us to "look through nature up to nature's God."

Flower gardens were ever held in high estimation by persons of taste. Emperors and kings have been delighted with the expansion of flowers. "Consider the lilies of the field," said an exalted personage, "how they grow;" for Solomon, when clothed in the purple of royalty, "was not arrayed like one of these." Nature, in her gay attire, unfolds to view a vast variety, which is pleasing to the human mind; and consequently has a tendency to tranquilize the agitated passions, and exhilarate the man, nerve the imagination, and render all around him delightful.

The cultivation of flowers is an employment adapted to every grade, the high and the low, the rich and the poor; but especially to those who have retired from the busy

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scenes of active life. Man was never made to rust out in idleness. A degree of exercise is as necessary for the preservation of health, both of body and mind, as food. And what exercise is more fit for him who is in the decline of life, than that of superintending a well ordered garden? What more enlivens the sinking mind? What more envigorates the feeble frame? What is more conducive to a long life?

Floriculture is peculiarly calculated for the amusement of youth. It may teach them many important lessons. Let a piece of ground be appropriated to their use—to improve in such a manner as their inclinations shall dictate—to cultivate such plants as are pleasing to their taste; and let them receive the proceeds. Let order and neatness pervade their little plantations. Let them be instructed, that nothing valuable is to be obtained or preserved without labor, care and attention—that as every valuable plant must be defended, and every noxious weed removed, so every moral virtue must be protected, and every corrupt passion and propensity subdued.

The cultivation of flowers is an appropriate amusement for young ladies. It teaches neatness, cultivates a correct taste, and furnishes the mind with many pleasing ideas. The delicate form and features, the mildness and sympathy of disposition, render them fit subjects to raise those transcendent beauties of nature, which declare the "perfections of the Creator's power." The splendid lustre and variegated hues (which bid defiance to the pencil) of the rose, the lily, the tulip, and a thousand others, harmonize with the fair, fostering hand that tends them—with the heart susceptible to the noblest impressions—and with spotless innocence.

Situation.—As to the proper situation for a garden, it is not always in our power to choose. A level plat, however, is to be preferred; for, if there be considerable descent, the heavy rains will wash away the soil. A southern aspect, sheltered from the north and north-west winds, is a proper situation for most plants. An inclination towards the north, or west, or any point between them, should, if possible be avoided.

Soil.—The natural soil should be a deep loam, which is easily made rich, by old rotten manure. But here, again, it is not always in our power to choose such a soil. In such cases we must endeavor to imitate—we must dig and carry off—and bring on loam, &c., ane make a rich soil. The ground ought to be well pulverized with the plow or the spade. In a word, what is wanted is a deep, rich soil, natural or artificial, not too wet, nor too dry.

The ground in a garden must be kept rich, and often stirred. It ought to be manured every year. A compost made of decayed vegetables, yard manure, rotten leaves, ashes and mould from any place, where it can be had, is proper for a garden. A garden should be well defended, by a high, tight-fence, especially on the north and west.

Sowing and Planting.—In the first place, the ground must be made fine, as well as rich. It should be moderately moist, not too wet nor too dry. The beds should be raised three or four inches above the level of the walks; and the seeds ought, by all means, to be sown in rows, ten or twelve inches apart; and the earth should be moderately pressed upon them. The time for sowing either annual, biennial, or perennial flower-seeds, is in the months of April and May, according to the state of the season. Very small seeds may be covered with fine earth nearly half an inch; larger ones in proportion to their size; and those as large as a pea, to the depth of an inch, or a little more. Seeds of delicate plants should be planted in flower-pots, and the earth kept moderately moist, by watering with a watering-pot, that is finely pierced, and does not pour heavily; or the pot may be placed in the pan, and water supplied at the bottom. The pots should be exposed to the sun, except from eleven, A. M., to two, P. M., when a powerful sun might scorch the vegetating seed. The mould for pots should be rich, and sifted through a coarse sieve, made for that purpose.

Transplanting.—The best time, perhaps, for transplanting annual plants is in June, and for biennial and perennial plants in September or the beginning of October, remembering, in all cases, to take a sufficient quantity of earth, with the roots, where it can be done with propriety. Scoop trowels will be found useful implements in this operation, which ought not to be done when the ground is very wet, but when it is only moderately moist, and in a cloudy day, or a little before the evening, or previous to a shower. If the ground be dry, shading the plants, and a little water, may be necessary, for a short time. In case the roots should be small, or injured, or destitute of earth, when taken up, they must be shaded during the day, until they have gained strength. In placing a plant where it is to stand, great care is necessary to place the roots in their proper position, to bring the earth in contact with them, and press the earth moderately about them.

If the plant is to be planted in a pot, place a piece of earthen ware over the aperture in the bottom, that the superabundant water may drain off, which would otherwise saturate and rot the roots. The pots should be nearly filled with rich earth, and the plant carefully placed in the center, and the mould

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brought into contact with the roots, and moderately pressed.

Cultivation.—The plants must be properly thinned while they are small; for, if left too near each other, they interfere, grow slender and weakly. As the plants increase in size, remove the weakest, and so continue to do until they stand at a proper distance. All plants of every description should stand at such distance one from the other, as that the air may circulate freely about them, and that the sun may have its proper influence in bringing them to perfection. The air and sun are absolutely necessary in perfecting the growth of plants, which never ought to stand so near as to interfere with each other.

The earth ought to be kept loose about the plants, and for this purpose a prong-hoe is a useful instrument. Moving the earth should be done in dry weather; as plowing, digging and hoeing in wet weather, leaves the ground in a bad, clammy state. In a dry season, stir the earth about plants, and spread old coarse hay or straw about them. Old hay spread about the plants keeps the earth cool, and retains the moisture, and is very useful to vines.

Weeds of every species must be removed, and the sooner the better after their appearance. No weed should be suffered to flower in a garden, nor in its border. The beauty of a garden depends very much on order and neatness—a place for everything, and everything in its place—keeping out the weeds, and removing everything when decayed. No garden can show to advantage, where weeds are permitted to usurp the place of useful plants.

[Fessenden's Com't Farmer & Gardener.

ABUSE OF THE LUNGS.

Miss C. E. Beecher, in a recent book, says: "It is the universally acknowledged fact, that the present generation of men and women are inferior in health and in powers of endurance to their immediate ancestors. And in all quarters the cause is sought, while many varying answers are given.

It is probable that no *one* cause can be assigned as the sole reason. But it can be made to appear probable that the abuse of the lungs, by supplies of impure air, has had more influence than any one thing in the general decay of health. Our ancestors always slept in cold and well ventilated chambers. And in the family by day, the broad-mouthed chimney and uncorked doors and windows secured a constant flow of cool and pure air, while daily exercise in family work, by women and children, and out-door work by men and boys, secured the cheerful spirits and healthful exercise most favorable to body and mind."

THE UNSOLD LAND.

A billion of acres of unsold land
  Are lying in grievous dearth;
And millions of men in the image of God
  Are starving—all over the earth!
Oh! tell me, ye sons of America,
  How much men's lives are worth!

Ten hundred millions of acres good,
  That never knew spade or plow;
And a million of souls, in our goodly land
  Are pining in want, I trow;
And orphans are crying for bread this day,
  And widows in misery bow.

To whom do these acres of land belong?
  And why do they thriftless lie?
And why is the widow's lament unheard—
  And stifled the orphan's cry?
And why are the poor-house and jail so full—
  And the gallows-tree built so high?

Those millions of acres belong to Man!
  And his claim is—that he NEEDS!
And his title is sealed by the hand of God—
  Our God! who the raven feeds:
And the starving soul of each famished man
  At the throne of justice pleads!

Ye may not heed it, ye haughty men,
  Whose hearts as rocks are cold!
But the time will come when the fiat of God
  In thunder shall be told!
For the voice of the great I AM hath said,
  That "the land shall not be sold!"

HOW TO OVERCOME EVIL.

Johnny Wilson sat on the stairway, crying as though his young heart would break. I took him on my lap, and told him to tell me why he was crying.

"Billy Johnson was just above me in the spelling class, and because I turned him down, he got angry. At noon I was flying my new kite on the plain: he came up, asking me to let him fly it. Thinking it would make us good friends, I let him, but on purpose he let it go into a tree, and tore it. I'll be revenged, yes, I'll be revenged!"

"Do good for evil," said I.

"I will try," came sweetly from Johnny's lips.

That evening, as Johnny was engaged in a "famous" game of ball, Billy came up, and wished to play, but could not, as he was odd.

"Here, Billy, you can have my place," said Johnny.

Billy looked at Johnny a moment in silence, and then said, "Johnny, I tore your kite; I am sorry; mine is behind that tree, it is yours; and after this we shall be good friends."

That night, as Johnny knelt, and said, "Forgive us our trespasses, as we forgive those that trespass against us," he felt he had forgiven one who had trespassed against him.

A new method has been invented for heating rooms, gas being used for fuel. A room 15 feet square is heated for one and a half cents per hour.

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STOCK REGISTER.

SHEAP SHEARING FESTIVAL AT MIDDLEBURY, VERMONT.

MESSRS. EDITORS—Having seen a notice in the Ohio Farmer, from a gentleman in Jefferson county, that he would shear the Silesian Sheep for dollars and cents against any breed in the United States, I was induced to advertise through the Agricultural papers West, that I would shear thirty ewe lambs dropped last March, against an equal number of any one man's raising in the world, for quantity and quality, unwashed or cleansed, or for dollars and cents, according to live weight, every man keeping his sheep as well as he pleases. Now I propose, in compliance with what I have published, to hold this Sheep Shearing Festival at Middlebury, on the 17th and 18th of June next, commencing at 10 o'clock in the morning of the 17th. The first day will be devoted to a general exhibition of horses; also, there will be purses offered for the fastest time made by trotting horses. Also, there will be an exhibition of ladies and gentleman's horsemanship, to be held on the Fair ground near the village. Also, at the close, a Sheep Shearing Festival Ball, to be held at the Addison House, Middlebury.

Now, one and all are invited to attend, and have a good time. All papers will please confer the favor to give notice thro'out the land, and oblige A. L. BINGHAM.
[Country Gentleman.

The foregoing notice from friend Bingham, one of the great Sheep men of our native Green Mountain State, shows how things are beginning to be done among the true nobility of the land.

Instead of a tawdry array of red cloth and yellow quality gentlemen, dignified with military titles, as of yore—instead of the braying of horns of divers crooks and curvatures, and the din of drums—instead of the explosion of gunpowder, and the imbibing of rum, and whiskey, to inspire patriotism, as of yore, on all public occasions—we see the sterling yeomanry of the country, the men who till the soil, the men who turn their attention from year to year to the improvement and propagation of domestic animals, the men who do the real business of the country—who coin its wealth and make up the whole sum of its actual useful production, coming soberly but intelligently together to witness the ultimated results of well directed and judicious effort to test the merits of their respective animals, to compare their skill in the graceful but sometimes dangerous equestrian exercise; the whole to wind off with feasting and dancing. What more befitting way could be devised to rejoice and be glad over the progress of the age? It strikes us as a modern tournament of the true nobility, and of the right kind. May the weather be auspicious, and all hearts glad. We approve of such social parties and should like to be a participant.

BEETS FOR MILCH COWS.

FRIEND HOLMES:—I have for some years been experimenting in roots for cows in milk. I have tried the English flat turnip, which I found of litte benefit. Potatoes are good, and a cow fed half a bushel of potatoes each day will gain in flesh and give a larger quantity of milk. Rutabaga turnips I have tried, and consider them nearly equal to potatoes. Carrots I have fed to my cows for some years. While fed upon them at the rate of one-fourth of a bushel per day, I found they did as well as when I gave them double the quantity of potatoes.

The long orange carrot is the variety that I cultivate. I consider them far superior to the white field carrot. But this season I have been feeding my cows upon beets at the rate of half a peck to the cow per day. I find they gain in flesh, give a greater quantity of milk, and the quality of the milk richly pays for the beets given. About one half the quantity of milk will make a pound of butter, that it will take when cows are fed on potatoes or turnips. And another advantage is, they are easily grown. Last spring I planted four square rods of ground well pulverized, manured with about two thirds of a common cart full of muck mixed with stable manure, about half and half. Planted by hand. They came up well, but after they got up a worm attacked them, and I should judge destroyed one half of them, so that I did not harvest but about twenty-five bushels. But I considered them worth for my cows double the quantity of potatoes.

Perhaps there may be others that have been experimenting in roots. If so, I should like to see the result. [Maine Farmer.

RELATIVE PROFITS OF MILK AND BUTTER.

Warren S. Judd, of South Hadley Falls, informs us that during the past winter he sold milk, at his door, for four cents per quart, at which rate his cows averaged twenty-three and a half cents a day each. He tried making butter, and found that the same quantity of milk produced a pound of butter a day, which sold at twenty-eight

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cents a day, making a gain of four and a half cents a day in favor of butter making, at the prices named. On a trial of three days, six quarts of milk, beer measure, produced a pound of butter. [Boston Cultivator.

PROFITS OF DAIRYING IN CAYUGA CO., N. Y.

L. TUCKER & SON—Having noticed of late, several aricles in the Cultivtor, relative to the profits of dairies, I take the liberty of sending the report of a dairy in this town. And, as it belongs to a neighbor in whose business I have no interest, I suppose I may be pardoned if I brag a little.

The dairy belongs to William White, and is managed by himself and wife. It foots up thus: From 14 cows, all of native breed, and managed in the ordinary way, he sold 2,920 lbs. of butter at 25 cents per pound, which amounts to $730.00.

From the buttermilk, after deducting the the value of grain fed, he made pork enough at $8 per 100, to come to $163.00—14 calf skins, at 62 1-4 cents, $,72—Making a total of $901.75, or an average of $64.41 per cow.

This we claim as ahead of anything yet published in the Cultivator for last year, and we challenge the state of New-York to beat it. The farm of Mr. White consists of 110 acres, which cost, two or three years ago, $25 per acre. He sold from it last year over $1900, worth of produce, the result of the labor of himself and wife alone. Considering the amount of capital, and the labor, where can it be beat? H. H. TUTHILL, in Country Gentleman.

We insert the foregoing article, simply to call anew the attention of our dairy farmers to what can be done by well directed effort and good management, and with the hope that it may meet the eye of some who need encouraging to do likewise. Who doubts that Wisconsin soil will produce just as large results, with equally good management?

It is certainly singular that the most fertile of lands should have its herbage burnt up from year to year, or, what is worse, be allowed to rot and send forth its noxious miasma—while butter continues worth from 25 to 30 cents per pound, and cheese as much in proportion. Where are our dairymen and dairy-maids? Echo answers *where?*

EDS. FARMER.

WELLS ON THE AMERICAN DESERT.—The Secretary of War by actual experiment has proved the entire success of Artesian wells on the plains of the Mesilla Valley. One well seven hundred feet deep; supplies an abundance of good water.

CURE FOR CORNS ON HORSES FEET.

MESSRS. EDITORS—In one of your late numbers, a correspondent requires the best cure for corns in horses. I have a very valuable horse, that, from carelessness and inattention, was corned in his fourth year. My blacksmith wished to cut it out, but my own judgment said no. I had his shoes pulled off, took him home and turned him out. This was in May; in October I took him to the same blacksmith, and he declared his hoof to be sound and without blemish. I have seen it tried several times—always with success. I never saw a case where the knife was used that did not materially injure the value of the animal. We all know that an easy shoe will cure corns on our own feet quicker than any other remedy. The two cases are parallel. A SUBSCRIBER in Country Gentleman.

PREMIUMS TO FARMERS.

The New York State Agricltural Society offers a premium of $75 for the most satisfactory experiments in the application of all the recognized Fertilizers to five acres of Indian Corn, each specified fertilizer being applied to a careful measured rood of land, and a full record of the tillage and its results submitted to the Secretary before the first of February next.

Also, $50 for a more limited series of experiments on three acres of land.

Likewise, a premium of $50 to the New York boy, under eighteen years of age, who shall grow the best acre of Indian Corn during 1856.

Likewise, $50 to the New York boy, under eighteen, who shall, in 1856, grow the best acre of Carrots. [Horace Greely agrees to pay the two last premiums]

Also, $50 for the best and $30 for the second best cultivated Farms of not less than 50 acres (excluding wood and waste,) devoted mainly to Grain growing.

Also, $50 for the best and $30 for the second best Farm of like dimensions, devoted mainly to Grazing and the Dairy.

COURAGE AND DISCRETION.—A courageous ram took it into his head to resist a locomotive. The brave old sheep heard the whistle, the roar and the rumble; he saw the shower of fire and glaring eye-balls of the monster; he curled up his majestic head, and he battered his brow into the foe. Alas! poor ram! not a lock of wool nor a piece of horn could be found. The owner in lamenting the loss of poor rammy, said:—"I admire his pluck, but confound his discretion."

IN THE Lunatic Asylum at Utica, N. Y., is a female who talks about becoming empress of the world and using the rainbow for a waist ribbon. This is the poetry of madness.

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DOMESTIC ECONOMY.

MAKING BUTTER.

The first requisite to making good butter is to have good milk. To have good milk two things are absolutely essential, good cows and good keeping. Care must be taken that cows have good food and that they do not eat things that taint the milk, as cabbage stumps, garlic and other strong aromatic vegetables. The best food for milk in summer is good tame grass, as timothy, bluegrass, red-top or clover. The white clover is the best. Admixture of white clover with any or all of the other grasses, is doubtless preferable. Having from good cows and good keeping obtained good milk, the next essential thing is

CLEANLINESS.

It is in vain to expect good butter from dirty pans, crocks, pails, churns, rooms or place. There is nothing more easily tainted than milk; and butter is next to it for this peculiar infectious quality. Any impurity, bad smell, decomposing substances about milk will harm it. It must be set in and surrounded with pure atmosphere. Where there is filth there is generally a process of decomposition going on, which throws out bad gases and a disagreeable odor. Milk absorbs these when they come in contact with it. Decaying vegetables, wood and everything that can engender filth or mustiness or sourness must be carefully removed. To avoid sourness, all the vessels, such as pails, pans, crocks, churns, &c., should be thoroughly scalded with boiling water before used. They must be sweet, and kept sweet, to be sure of good butter. A failure here, is the cause of an immense amount of bad butter. The milk room and things must be not only tolerably clean and sweet, but absolutely so. Absolute purity is necessary.

SETTING THE MILK.

The milk should be set in broad, shallow vessels. Broad, shallow, earthen, stone, or tin pans are best. The milk should never be over an inch or an inch and a half deep. The object is to have the cream rise and rise quickly. The cream or butter is held in very smal particles all through the milk. It is lighter than the milk, and if left to stand in perfect quietness will rise to the top. But it is so little lighter that it rises very slowly. If the milk is deep, as in a deep crock or pail, the butter or cream from the bottom does not have time to rise to the top before the milk sours. Let any one try the experiment of setting the milk in shallow and deep vessels and they will soon have a practical demonstration of the propriety of our recommendation. Milk should set from twenty-four to thirty-six hours, or as a general rule till it sours. It should occupy a cool place secured from flies and insects, and should be undisturbed till it is skimmed. It is necessary to have it in a cool place, in order that it shall not sour before the cream all rises. When skimmed some of the milk should be taken off with the cream, otherwise it will be too thick for churning. The cream should be kept in a cool place free from every impurity.

CHURNING.

Churning should be done as often as twice or three times a week, especially in warm weather. Many let their cream stand too long. Some churn every morning. Some churn the milk while it is fresh; but experience, we believe, has generally decided in favor of churning the cream as often as twice a week. Some suppose that the better quality of butter is obtained by churning the cream before it sours, but nearly all good dairymen, so far as we are acquainted, let the cream sour before it is churned, but take good care that it does not get too sour. To obtain the very best article of butter it is probably best to skim the milk after it has set some twelve or eighteen hours, and use only that; letting the milk stand for a second rising. Some skim every morning, and for the best butter use only the first morning's skimming. The temperature of the cream for churning should be about 55 degrees, Fah., when it is put in. It will rise from five to ten degrees while churning, owing to the chemical changes during the process. If the temperature is much higher than this the butter will be too soft and white. If it is much lower the butter will not come readily, nor be easily gathered, nor yield so large a quantity. The cream should be churned rather slowly, but steadily, and butter should not be expected under forty or forty-five minutes. If it comes sooner than this it will not be of the best quality. The time required for churning is much modified by the temperature of the cream. But it should not be so warm as to produce butter under 35 minutes churning, nor so cold as to require over 50 minutes; 40 to 45 minutes is the best period.

WORKING THE BUTTER.

When the butter has come it should be slowly churned or paddled with the dasher till it is gathered. This done, it must be taken from the churn and thoroughly worked, or washed until it is entirely free from buttermilk. The first thing and great thing is to clear it of all buttermilk; not a part only, but all. It may be done by working it with the hand or paddle, or washing it. It may not be the best way. If washed, very cold and pure water should be used. If worked

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with the hand it should be quickly done, that the warmth of the hand may not soften or melt the butter. The hands should be well cooled in cold water, and cooled often while working, by holding them in the water. It is well to work the butter twice or three times to be sure that all the buttermilk is out; once at the time it is churned, again the next day, and again the second morning.

PACKING DOWN.

When the buttermilk is all out and the butter is cold and hard, it should be well salted and solidly packed in stone jars or good wooden firkins, and covered over with clean wet linen or muslin cloth, and then covered with a layer of salt half an inch thick. To be kept it should be set in a cold, dry, clean cellar.

An experienced writer sums the whole up thus: "The chief points besides cleanliness, in making good butter, are these: To milk at regular hours; to place the milk in shallow vessels; to have a perfectly clean cellar, with a hard brick or flagstone bottom, and with shutters and wire screen windows to admit air and exclude insects; to skim the milk the moment it coagulates or 'lobbers,' which will be in 30 or 48 hours; to churn the cream at a temperature between 60° and 65° (in hot weather 55° to 60° is better) by the thermometer; to free the butter as much as possible from the buttermilk, and then add a sixteenth part of the purest salt; to work out the remaining buttermilk in 12 hours afterward, and again in 24 hours, being careful not to work it too much at a time; to pack it closely in stone jars, till nearly full and then spread clean, white muslin cloth over the top, pack closely a layer one inch thick of fine salt upon the muslin, and finally cover the jar with a neatly fitting cover. Butter thus made will keep a year, if placed on the bottom of a cool cellar."

[Valley Farmer.

DOMESTIC RECIPES.

WASHING FLANNEL.—To prevent flannel from shrinking and turning yellow, wash them in hot suds, and rinse them in clear, soft, boiling water—standing until cool enough to wring out.

INK SPOTS may be removed from linen by dropping melted tallow on them and then washing.

MOTHS are said to be effectually excluded from clothes kept in cedar chests, or with cedar shingles occasionally laid between the clothes in ward-robes, closets, &c. However, it is best to take all clothes out once a month, and air and shake them.

TO PREVENT colors fading, dip new calico, pocket-handkerchiefs, &c., in salt water.

CRACKS IN STOVES may be effectually stopped by a paste made of ashes and salt and water Iron filings and sal ammoniac make a still harder and firmer cement.

GILT FRAMES, if cleaned are soon worn and spoiled; to prevent which, preserve them by applying a transparent varnish.

BEE STINGS may be quickly cured by applying repeatedly a soft paste made of saleratus and water—the potash neutralizes the acid poison.

ADHESIVE PASTE, made of rye flour, with a little alum added while it is boiling, is almost as strong as glue.

CARPETS last longest by being often shaken, preventing the dirt under and in them from grinding out the texture; and by not being swept too frequently.

[Tucker's Rural Register for 1856.

LETTER FROM AN OLD CHEESEMAKER IN VERMONT.

EDS. PRAIRIE FARMER—I saw in the Farmer an inquiry about making cheese. As I have had some twenty years' experience, I send you my method. To make good cheese there are several rules to be observed: first, everything used in the business should be kept as sweet and clean as possible. The night's milk should be strained in tin or brass kettles, and hung in a sweet, cool place, as milk will absorb impurities. In the morning it should be warmed and mixed with the morning's milk, in your tub or whatever you make your cheese in. When ready for the runnet the temperature should be from 80° to 84°. Put in sufficient runnet to come in 40 or 50 minutes; cover warm to prevent the cream from rising. When the curd will not adhere to your finger, then cut it with a long knife several times across; let it stand fifteen minutes; then take your dipper and turn the curd gently from top to the bottom; let it remain fifteen minutes longer, and break carefully with your hands. Place the strainer over, and let the curd settle; then dip off some to warm natural heat. Dip off also some of the cold whey; turn on the warm and stir with your dipper slowly. Repeat this several times.

To prevent the curd settling together, it should be stirred and broken carefully and often; the temperature should be from 100° to 110°. In the course of two hours from the time you commenced warming the whey, when you can squeeze some of the curd in your hand, and it seems cooked and dry, it will do to dip into your strainer. It should then be stirred carefully, to prevent adhering together, but should not be squeezed or handled roughly. The whey should work off clean, as it is very easy to waste the best

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part of the cheese by being in a hurry. It should strain very dry and get cool; then add five tea-cups of Liverpool salt to one hundred pounds of curds, stirring well in. I always sift my salt before using it. It is now ready to be put into the hoop. Let it stand an hour before pressing. Then press lightly at first, adding to the pressure to make it firm and solid. After pressing 4 or 5 hours, it should be turned and closed; then press till the next day's cheese is ready for the hoop.

I get my cheese into the hoop about noon, allowing half a day to make a cheese. If the weather is cold, the cheese should be set by a fire to cure, as it will grow bitter standing in a cold room. There is no need of greasing the outside of a cheese which is cased. Here in Vermont we use dairy-stoves for making cheese; they are more convenient and save much labor.

I will make a few remarks on preparing rennets for mild cheese. The rennet should be one year old, as it will fetch more cheese at that age. Dairying people here kill their calves at four days old; drain out the whey from the curd, then add as much salt as there is curd; put it back into the rennet, and put them into little bags made of cotton cloth, each one separate; tie them tight and hang them in a dry place to cure. The bag prevents insects working in the rennets and injuring them. When wanted for use, steep three rennets in two pails of cold water ten or twelve days; then strain it off into a jar and it is ready for use. Add salt enough to have it always in the bottom of your jar, as many people spoil a whole dairy by using rancid rennet.

[A Farmer's Wife, in Prairie Farmer.

LIQUID FOR COLORING THE HAIR BLACK.

Alex. Reed, of Pittsburg, Pa., having seen it stated in the Scientific American, in answer to a correspondent, that we were not acquainted with any liquid that would color the hair black, and not stain the skin, gives the following as a receipt that will do it:—"Take one part of bay rum, three parts of olive oil, and one part of good brandy, by measure, and wash the hair with this mixture every morning. In a short time the use of it will make the hair a beautiful black without injuring it in the least."

We know that pure olive oil and good brandy in equal parts, make an excellent hair wash, but never have known it to color the hair. The above mixture *may* color the hair, but we would not infer from its nature that it would. There can be no doubt, of it being a tonic of much superior character to many that are sold at an extravagant price. The articles must be mixed in a bottle and always shaken well before they are applied. It is not an easy matter to obtain either pure olive oil or French brandy, to prepare such a mixture, but we suppose that the above receipt refers to the common articles sold by druggists. [Scientific American.

For the Farmer.

CHURNS,—THE MANAGEMENT OF BEES.

Messrs. Editors—There has been so much written about churns and churnings, in the various agricultural papers the past winter, that I feel inclined to give my opinion, also, on the subject. Some writers greatly recommend "Crowell's Thermometer Churn," but three years' faithful trial of one, which cost $4.50, causes me to differ from them. There are several objections to this churn. The turning of the crank is much more fatiguing than the raising of the dasher in the common Dutch churn; the iron work about the crank invariably gives a disagreeable flavor to the butter—unless it comes, as in the spring it frequently will, in ten minutes or less. It is also very clumsy to handle, and difficult to clean; I can truly say that not one of several girls I have employed has ever cleaned it as a churn should be cleaned; that duty I have always myself performed. I discarded mine this winter, and bought a $1.75 dasher churn—and I really think the churn has yet to be patented that will prove superior to it.

I do not wish to encroach on your time, but would like to ask a question: Is it possible for one ignorant of all practical knowledge on the subject, to successfully undertake the management of a few bee-hives? Some have said, "O! there is nothing easier; we never kept any before, and had no trouble in hiving them!" And, really, the delicious honey on the tea table almost persuaded me to invest a few dollars; but now I hear that the bees are all winter-killed. I have read a great deal on the subject, and yet doubt my ability to keep a few swarms. Can you give me any advice or comfort in this doubt—and so oblige a well pleased subscriber to your paper. J. C. K.

In reply to the above inquiry about bees, we would say that they are *animals* with which we are not very well acquainted; and for the reason that we were never on good terms. From our earliest childhood they always seemed disposed to travel clear out of their way to sting us; and we have adopt-

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ed the same course in relation to them that we have with persons who carry cureless aggressive stings, as far as possible we keep clear of them—never refusing their honey, however, when we know it is genuine, the proof of which is to get it in the comb. Yankees, in their ingenuity, have invented a power of patent honey, but we have not yet heard of any cantrivance for making the comb, though we think some ingenious fellow will one of these days beat the bees all hollow at their own trade, except, perhaps, in quality and flavor.

But, seriously, the bee is on the whole the most interesting of all the minor animals, and teaches us many a practical and moral lesson. We would commend his acquaintance to all who can naturally live on good terms with him. In a country like this, abounding in flowers, their range is more than ample, and the *sweet* product of their labors great. Our friend J. C. K., and all others who would manage them successfully, should buy the "American Bee Keeper's Manual," at a cost of about six shillings. It contains the accumulated wisdom and speculations of ages on the subject.

EDS. FARMER.

MAKING A NEEDLE.

I wonder if any little girl who may read this, ever thought how many people are at work all the time in making the things which she every day uses. What can be more common, and you may think, more simple, than a needle? Yet, if you do not know it, I can tell you that it takes a great many persons to make a needle, and a good deal of time too. Let us take a peep into the needle factory. In going over the premises we must pass hither and thither, and walk into the next street and back again, and take a drive to a mill in order to see the whole process. We find one chamber of the shops is hung around with coils of bright wire, of all thicknesses, from the stout kinds used for codfish hooks, to that of the tinniest cambric needles. In a room below, bits of wire the length of two needles, are cut by a vast pair of shears; fixed in the wall. A bundle has been cut off; the bits need straightening, for they just came off from the coils. The bundle is thrown into a red-hot furnace, and then taken out and rolled backward and forward on a tackle, untill the wires are straight. This process is called "rubbing straight." We saw a mill for grinding needles. We go down into the basement, and find a needle pointer seated on his bench. He takes up two dozen or so of the wires and rolls them between his thumb and fingers, with their ends, first one end then the other. We have now the wire straight and pointed at both ends. Next is a machine which flattens and gutters the heads of ten thousand needles in an hour. Observe the little gutters at the head of your needle. Next comes the punching of the eyes, and the boy who does it, punches eight thousand an hour, and he does it so fast your eyes can hardly keep pace with him. The splitting follows, which is running a fine wire through a dozen, perhaps, of these twin needles.

A woman, with a little anvil before her, files between the heads, and separates them. They are now complete needles, but rough and rusty, and what is worse, they easily bend. A poor needle, you will say. But the hardening comes next. They are heated in batches, in a furnace, and when red hot are thrown into a pan of cold water. Next they must be tempered, and this is done by rolling them backward and forward on a hot metal plate. The polishing still remains to be done. On a very coarse cloth, needles are spread to the number of forty or fifty thousand. Emery dust is strewed over them, oil is sprinkled, and the cloth is then rolled up, and with several others of the same kind, thrown into a sort of wash pot to roll to and fro for twelve hours or more. They come out dry enough, but after rinsing in clean hot water, and tossing in sawdust, they look as bright as can be, and are ready to be sorted, and put up for sale. But the sorting and doing up in papers, you may imagine, is quite a work by itself.

STONE CEMENT.—A cement of three parts fine coal ashes, one of red lead, three of sand, and two of chalk, (by weight,) made into a putty with oil, is excellent for filling up the exposed joints of stones, brick, &c. It becomes as hard as marble.

IN SIBERIA on the west coast of Africa, large deposits of malleable native iron exist in a state of great purity. This iron does not contain a trace of carbon, and it is distinguished from that which is called meteoric iron by the absence of nickel in it.

A MAN may think well, and yet not act wisely. The power to see what is right is very different from the power of doing it. A man of moral energy, will accomplish more with a little knowledge, than a man of inferior will, with much. And strength of will is generally acquired by struggling with difficulties in early life.

DO NOT contract habits in youth which cannot be tolerated in old age. If you have no mercy on yourself, have at least a little for your friends.

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MISCELLANEOUS.

POCAHONTAS.

BY HORACE BUSHEE.

Suggested by Sully's Picture, presented to the Wisconsin State Historical Society.

"Her eyes, like stars of twilight fair;
Like twilight, too, her dusky hair;
But all things else about her drawn
From May-time and the cheerful dawn."

A glad, bright eye that seems to watch and follow,
Through the blue ocean of the summer air,
The sportive darting's of some joyous swallow
That revels in the bliss of Freedom there;
A sweet young face that never learned to shun
The kisses of the amorous winds and sun.

And dark hair garlanded with freshest flowers,
Culled from the dewy glades of forests old,
Lovely as the bright wreath hung round the towers
Of the retreating storm cloud, from the gold
Of sun light and the crystal of the rain,
Woven in a bright and many-tinted chain.

Thus has the artist limned the gentle daughter
Of the stern-browed and wild-eyed forest king,
Powhatan. Nature in the wilds had wrought her
By sweet degrees and kindlest nourishing,
Free, unaffected movements, native grace
Were hers, such as befit a princely race.

She had not blanched into a sickly whiteness,
In dull, close chambers, shut from cheerful day,
She breathed the untainted forest air. The brightness
Of the unmitigated noon's hot ray
Smote her young cheek and left its glowing trace—
A rich, warm, healthful bronze—upon her face.

The vandal hand of Fashion had not blighted,
With gewgaw arts and vile depravities—
Such as, where civilization's lamp is lighted,
The daughters of a paler race devise—
Her lithe young form, for she was ever near
To Nature, and her kindly voice could hear.

And dwelling thus within the august presence
Of all things grand and beautiful, the sky,
And the great lights of heaven, she learned glad lessons
From the bright world around her. Silently
Its freshness, freedom, and wild grace had grown
Upon her, formed her, and became her own.

SWISS COURTING.

When a girl has arrived at a marriageable age, the young men of the village assemble by consent on a given night at the gallery of the chalet in which the fair one resides. This creates no manner of surprise in the minds of her parents, who not only wink at the practice, but are never better pleased than when the charms of their daughter attract the greatest number of admirers. Their arrival is soon announced by sundry taps at the different windows. After the family in the house has been roused and dressed (for the scene usually takes place at midnight, when they have all retired to rest.) the window of the room prepared for the occasion, in which the girl is first alone, is opened. Then the parley commences, of rather a boisterous description; each man in turn urges his suit with all the eloquence and art of which he is possessed. The fair one hesitates, doubts, asks questions, but comes to no decision. She then invites the party to partake of a repast of cakes and kirsch wasser, which is prepared for them on the balcony. Indeed, this entertainment, with the strong water of the cherry, forms a prominent feature in the proceedings of the night.

And having regaled themselves for some time, during which and through the window she has made use of all the witchery of woman's art, she feigns a desire to get rid of them, and will sometimes call her parents to accomplish this object. The youths, however, are not to be put off, for, according to the custom of the country, they have come here for the express purpose of compelling her, on that night, there and then, to make up her mind, and to declare the object of her choice.

At length, after a farther parley, her heart is touched, or at least she pretends it is, by the favored swain. After certain preliminaries between the girl and her parents, her lover is admitted through the window, where the affiance is signed and sealed, but not delivered, in presence of both father and mother. By consent of all parties, the ceremony is not to extend beyond a couple of hours, when, after a second jollification with kirsch wasser, they all retire—the happy man to bless his stars, but the rejected to console themselves with the hope that at the next tournament of lovemaking they may succeed better. In general, the girl's decision is taken in good part by all, and is regarded as decisive.

[Heathland's Switzerland.

IS GRAPE CULTURE AND WINE MAKING FIRMLY ESTABLISHED AMONG US?—This question was put to a distinguished vine-grower in Cincinatti, R. Bucanan, Esq., more to satisfy some of our friends than to clear up any doubt of our own. The following is his reply: "I am happy to be able to say that, in the West at least, I consider the vineyard culture of the Grape firmly established. It is also increasing with great rapidity all over the West and Southwest. The sale of grape-cuttings in Cincinnati last spring amounted to over 2,000,000, and of stocks 300,000 I sold from my own vineyard 140,000 cuttings. This looks like progress. The demand for the wine fully equals the supply, but the hard times of last year caused an accumulation of the stocks of sparkling Catawba (the most expensive of our vines,) which will take another to diminish. I repeat to you in all candor my opinion, that the vine culture as now established is a branch of national agriculture that cannot retrograde. It has also the sympathy of the moral part of the community, who believe that the spread of the wine will diminish intemperance." [Horticulturist.

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For the Farmer.

ANGEL VOICES OF THE PAST.

"That heart, methinks,
Were of strange mould which kept no cherished print
Of earlier, happier times, when life was fresh
And love and innocence made holyday;
Or that own'd
No transient sadness, when a dream, a glimpse
Of fancy touched past joys." HILLHOUSE.

The eternity of the past is as uncircumscribed as that of the future—our conceptions of it are as vague and unsatisfactory; but, in its wider sense, to us it is only a kingdom of causes, or a land peopled with ideal and ghostly shadows. Its entities are all visionary, and its realities dreamy and phantasmagorial. Ideal nothings commingle with the heroic shadows of its mystic regions, and the volatile creations of fancy breathe and move with the stateliness and pride of conscious existence. The mind cannot distinguish between them; for whatever we may learn from history of the past, fiction dwells even in the province of history, and falsehood may often wear the semblance of truth in regard to its events and characters without its contradiction. The Past has three domains—*infinite*, *medial*, and *diminutive*. The first embraces all time past; the second, its history; the third, only individual life. The first engulphs these latter subdivisions, and extends beyond where thought is lost in its boldest adventures; the second is an extensive field, ample for study, and filled with details and experiences which are brought down to the last—the realm of Memory.

From the wide past thought brings us our sublimest reverence for the eternal I AM, whose existence has known no beginning, and at whose decree the great cosmos of the universe stood forth in its bewildering grandeur; from the past of history we derive lessons replete with the interests of life; from Memory come our aids to forecast, our tangible knowledge, our sympathies and our longings. Reflection broods over the events of past life, like a pilgrim among sepulchres and ruins—now worshipping some relic as an idol of holier qualities and paying tribute at the shrine of a sweet remembrance; and again doing penance for the atrocities of some transgression, or omission of duty recalled in bitterness. More cheerful still than this, it clothes its scenes only in the liveliest drapery of imagination. In reflection we cannot go back beyond the pale of memory, for it is she who brings to judgment events and references to be compared with the occurrences of the present, and to be woven into the web of character. The great past is so far beyond our comprehension that it fills us with awe; the past of history excites our wonder and amazement; but it is the past of life upon which we meditate in our sober moods, and from which there come stealing gently upon the soul the silvery voices of angels, with sweet and hopeful tho' sometimes melancholy melody. Recollections that throng the twilight haze of reflection, like a galaxy of brilliants, forming a bright bow of promise for the future, are drawn all from the scenes and companionship of childhood, youth and middle years. Old associations hallow the vista of past life, and Memory may revel in an atmosphere redolent with the perfumes of cherished pleasures. Time burys up many sorrows, and the waters of Lethe repose silently above the pride, passion, rivalry, worldly ambition and envy that embitter present moments as they pass; still these are alive within us, though dead to the past—for Memory, true to her ritual, binds most closely to the sympathies those records of goodness which argue the immortality of virtue. Folly and its register fade from her canvass, and selfishness itself dies out with the animal existence of which it is a propensity. She preserves the charming hues of life's purest joys and graces, and age gives her pictures more and more the facinations of youth. Her infancy had its downy couches, its excess of parental caresses, its luxury of anticipated wants and toys; Childhood—that rosy lawn between the cradle and the school-house—was a pastime among velvet meads, without briar or bramble—its prattle was the echo of truant rills, its laughter the warbling of birds in springtime—its every dew-drop was peopled with rainbows—

"Its every pathway led to flowers."

Youth dwelt among problems whose mystery was the magic and the spell that bound the growing intellect in apprenticeship to the life-long work of investigation and study. There were visionary things, crude facts, and doubtful qualities, over which the mind had not yet established its supremacy by subtle reasonings. Questions arose that would not brook ancestral answers; perplexities were battled with for glorious triumphs. Its achievements were laurels to be worn in after years—to bear the grandsire's rehearsal, and to cause a new thrill of life to quicken the pulses of the old man as he published his epitaph from the brink of the grave. Youth and merged into manhood; the poetry and true zest of life had begun. There was a deeper pathos in the songs of birds, a more bewitching power in the waning blush of evening, the growing stillness of twilight, and the stellar beauty of the midnight sky. The serene calmness of the azure vault crept into his soul with the bliss of peace for a moment, and then gave place to that "insatiable longing." "The stars sang together" the praises of God's handiwork, and he bowed in the presence of solitude. The splendor of the lurid "day king" quickened him to the duties and responsibilities of life; Nature's symmetry, purity and order taught

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him the heart-worship of the beautiful—from Nature, also, he had learned that still more fervent love for "the responsive beating heart."—

"Those fond sensations, those enchanting wiles,
Which cheat a toiling world from day to day,
And form the whole of happiness we know."

The silly girl that used to hold long *tete-a-tetes* with dolls, and broken china ranged in groups upon imaginary tables for imaginary viands and guests, while he was running riot among more invigorating sports, had grown a coy and blushing maiden. In his youth she was the fairy confident who placed her soft little hand in his, and laughed away the hours of many a joyous gala-day. Nay, did she not trick him of his sober dignity with roguish *naivete* and mirth?—and yet, he could not frown upon her; for then her sparkling eye would hide itself behind its drooping screen, and her little cherry lip would pout *so* reproachfully! Ah, the little maiden had a dreamy judgment, too, deep hidden in the alcoves of those glowing ringlets. The glee that rang forth in these sun-lit truantings was not the vacant language of thoughtlessness, but the matin of May-day. How full of playfulness, and yet how reserve and sensitive! To him, a problem full of facinating poetry. Now, she was in the early bloom of womanhood; bouyancy had become a statelier grace, and the thoughtful eye had learned to express that deeper language of the soul which the tongue may never utter—those electric pulsations that breathe the unison of hearts.

When Memory has grown old, her coral fingers paint most vividly these fondest scenes of this world's drama. To cheer the aged matron and the gray haired sire she brings this rapturous reverie. Gaunt Penury may threat, and stare with ghastly eye-balls, but he cannot fright away the bliss of glowing memories. The world may grow a stranger, and its avarice and pride drink up the waters of human affinity; Death may have robbed the hearth-stone one by one of its dear familiar faces—old companions may have fled, and the *present* may be drear and lonely; but age lives on the *past*, and holds converse with brighter circles than throng this bustling moment *now*. A hundred *to-days* may pass for nothing over the absent mind of age; but its *yesterdays* were—O, how happy! and the skies of early years were—O, how serene and cloudless! Fluctuations and reverses, of business and of care—depressions of hope—dark hours of despondency, are not recalled in lasting sorrow. Complacently the smile illumes the furrowed brow, and beams from the sunken eye— the Past had its "bright hours only." The retrospect of a virtuous life burys its regrets among jewels—pure, holy, eternal! Ambition, honor, love, the passions and the impulses, all blend in one sublime hope for the future. Wierd boughs may droop in mourning o'er the grave of a friend whose heart was light, and whose response was joyous, yesterday; but a star looks down upon the blue-eyed myrtle that enrobes the mound, and chants to it the lays of immortality. Hush! Angels whisper from the past of Memory—the dear ones whisper—"We shall meet again! We know in whom we trust—the future is eternal!" A. J. M.

OUR LITTLE BROTHER THAT DIED.

In a far off, unfrequented nook of memory's spacious hall, where the waters of oblivion have trickled through the decayed and broken wall, producing blackened mould and trailing moss, hangs a picture of somber hue, of the shadowy angel's work. 'Tis where the faithful copyist first plied his unpractised brush, and is rough indeed compared with some which hang a little down the hill; yet the heart in age returns to those neglected tenements, and, burnishing and repairing the dilapidated structures making it a favorite resort.

Of my childhood days I write, and then as now I had two brothers and one darling sister, and I the youngest of them all, and our sports were among the new mown hay, and autumns golden fruits, and we never thought of parting then in those days of joyous youth. But the sky looked down so frowningly and a chill wind blew one evening, and brother (that was next older than me) rose not on the morrow morn to join our merriment, and in low sad tones they checked my songs of glee.

A tall thin man come oft, and with noiseless tread entered the mysterious room, and when one day he staid a long, long time, I too stole softly into the forbidden precincts, where my mother's sobs and my father's heart-wrung sighs, told the sad event that was passing.

When next I entered that strange room, it was filled with stranger faces, and two beings of unwonted beauty stood at the head of a coffin. I have never since seen two persons of such unearthly beauty, and it has been a matter of conjecture with me if they were not celestial beings, visible only to the pure vision of childhood. They lifted me up to look at my brother, but it was not the brother of my play-days, and I did not know him, he was so pale, and cold and still.

Another brother bears his name and again we are four; but our mother's tears will flow, and our father heaves a sigh, and we all speak soft and low when we name our little brother that died. LIZZIE.

[Drew's Rural Intelligencer.

IT HAS been ascertained that happiness is a compound of which avarice is no ingredient.

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RECORD OF METEOROLOGICAL CONDITIONS,

At MADISON, Wisconsin, Latitude 43° 05' North, Longitude 12° 12' West. Altitude, 892 Feet above the Level of the Sea. APRIL, 1856.

DAILY.	7 A. M.			2 P. M.			9 P. M.				
APRIL.	Ind. of Barom.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Daily mean Temp'tr.	REMARKS.
1	29.5	30	2 S. E.	0	48	4 S.	10	40	5 S.	10	41.66	Rained from 5 P. M. all night.
2	28.58	44	5 S.	10	41	5 S.	10	36	4 S.	10	39.33	
3	28.95	38	4 W.	10	40	1 W.		37	2 W.	10	38.16	
4	29.19	37	3 W.	8	46	1 W.	5	32	2 S.	0	37.33	
5	29.14	34	3 S.	2	48	1 S. E.	0	40	3 S. E.	5	42	
6	29.05	42	1 S. E.	6	55	2 E.	3	38	2 N.	3	44	
7	29.9	36	1 E.	3	64	2 S. E.	5	44	2 E.	5	49.33	
8	29 9	44	3 S.	3	66	4 S.	10	62			57.66	
9	29.27	44	4 S.	0	58	3 S. W.	5	47	2 W.	3	47.16	First thunder storm, & spr. of rain.
10	29.43	39	3 S. E.	3	52	1 E.	0	38	3 S. E.	5	43.16	
11	28.95	40	1 S. E.	10	52	1 E.	0	50	1 E.	10	47.33	
12	28.93	40	4 E.	3	32	4 E.	0	36	3 N.	0	30.33	Repeated showers of rain & thunder.
13	29 37	29	2 S. E.	0	47	2 S. E.	2	41	1 S.	3	40.50	Copious warm rain during night.
14	28.89	38	3 S.	3	54	3 E.	0	49	3 E.	3	49	Repeated showers of rain.
15	28.58	52	4 S. E.	6	56	4 S.	5	50	5 S. W.	5	52.33	
16	29.1	50	3 W.	5	62	3 W.	2	50	2 W.	0	53.66	Balmy and fair.
17	28.98	48	2 S. W.	0	64	6 W.	3	48	3 W.	5	52.16	3d Lake freed of ice.
18	29.2	41	3 W.	3	49	3 W.	3	41	2 N.	3	43	
19	29.29	39	3 N. E.	2	55	3 N.	0				43.75	
20	29.33	46	1 N. E.	0	58	1 W.	0	38		0	46.33	
21	29.11	40	2 E.	0	60	1 E.	0	44	1 E.	0	48.66	4th Lake fr'd of ice.
22	28.80	44	1 W.	0	63	1 S. W.	2	50			55	
23	28.83	50	1 S.	0	60	3 S. W.	5	51			70	Thunder st. and heavy R. at 10 P M.
24	29.11	48	1 S.	5	61	2 N W.	4	52	1 E.	6	54.50	
25	29.12	57	3 E.	8	68	1 E.	10	60	4 E.	3	62.22	
26	29	60	3 S.	10	72	1 S. E.	10	60	2 S. E.	10	58	Repeated copious showers.
27	28.90	64	3 S.	8	67	4 S.	4	55	4 S.	6	59.33	
28	28.95	48	4 S.	5	57	4 S.	4	51	2 S.	5	53.16	
29	29.13	49	1 S.	4	58	3 E.	5	50	3 N. E.	8	53.33	
30	29.00	50	4 E.	9	54	4 E.	10	50	4 E.	10	50	Th'nd'r storm & R'd during night.

TOTAL AMOUNT OF RAIN during the month, 2½ inches.

FRESH FRUIT IN HERMETICALLY SEALED CANS.

Public attention was very generally called to this subject last year by Arthur, Burnham & Co., of Philadelphia, manufacturers of "Arthur's Patent Self-Sealing Cans and Jars," and large numbers of families all over the country were induced to try experiments, not only with Arthur's Cans, but with a variety of other cans offered to their notice. Arthur's Can, which is the simplest in construction and the easiest to use, is moreover the only one that we have ever seen with a single exception, that is constructed on right scientific principles. In the exception referred to, the can itself is in all respects less desirable, and few would have any hesitation in choosing between them. Arthur's can is entirely open at the top, with a channel around the mouth, filled with cement. It is sealed by heating the lid and pressing it into this cement, which is done in a moment. The cement is in the channel when the can is sold. The cans sustain no injury in opening, and may be used year after year. They are made of tin; and also of fire-proof earthern ware.

We have thus particularly referred to this can, that our readers may know how to distinguish it from all others. It is without doubt, the best yet offered to the public, and in an article of this kind only the best should be taken. We have used them ourselves, and know their quality. So have scores of our friends. Mr Godey, of the Lady's Book, good authority, as every one knows, thus speaks on the subject:

"There were a variety of Self-Sealing Cans offered to the public last year, and there will, in all probability, be a greater number during the coming season. Not one that we have seen bears any comparison, in our estimation, with 'Arthur's;' and our advice to all is, to try no other can or jar next year. This one will certainly keep fruit precisely in the condition, in which it is sealed up, is simple in construction, and easy of use, and cannot, we believe, be equalled, far less excelled, by any vessel got up for the purpose of keeping fruit in a fresh condition by hermetical sealing."

Fruits put up in hermetically sealed vessels are, as all who have used them know, in every respect superior to those put up in the old fashioned way. The process is, moreover, easier and cheaper. No housekeeper who has once tried the new method, will ever go back to the old.

We have presented this matter a little prominently, because it is one which almost every body has an interest. In calling attention to so admirable an invention, we but serve the common good.

[Philadelphia Merchant.

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EDITOR'S TABLE.

Close of the Half Year.—

This number closes the first half year of the WISCONSIN FARMER, under the new administration. Perhaps a word in relation to its progress, prospect and aspirations, may not be deemed inappropriate; and first in this behalf, we would tender our hearty thanks to the Press of the State and West, and to our numerous local agents, for the many kind notices and attentions we have received at their hands. We feel under no small weight of obligation, and hope in the progress of events to be able in some small degree to repay the kindness.

Our highest ambition on undertaking the publication of the FARMER, was to make it acceptable and useful to that numerous class in our young but thriving State, for whom it is more particularly intended. In this object, judging from our circulation, we have succeeded beyond our most sanguine expectations. Notwithstanding the irregularities of the FARMER, in being received by its subscribers in former years, and the many fears expressed to us, by letter and otherwise, at the commencement of this volume, of a continuance of the same evil—a fear so strong as to induce many to decline subscribing, and especially, pre-paying, until they saw whether we were going to be prompt and reliable—notwithstanding all this, we are happy in being able to say, that our subscription list has gone up handsomely, beyond our expectations; and it is still constantly increasing with every mail. We made our mark for a circulation of 8,000 the present year, and published an edition accordingly; with the continued friendly aids of the press, and our many other good friends, we shall find readers enough for the whole edition. We have at present plenty of back numbers for those who may wish to commence with the new series, and that we may not be short, we propose to enlarge the edition with the next number, and take subscriptions for half a year, for half the terms stated on the inside of the cover, when preferred. Let agents remember this, and add to their lists accordingly.

We hope the result of our humble labors during this year, will so far establish us among our numerous patrons as to remove all fears of irregularity in the future; and further, succeed in establishing in the minds of all, that a well conducted home agricultural journal, containing as it will the proceedings of the State Agricultural Society, and of the County Societies, together with all the interesting local information, is of much more value to our people, than one from out of the State, especially from the far east.

We intend to make the WISCONSIN FARMER emphatically what its name purports to be, before we are done, if life and strength are spared us. Such was our purpose when we took hold of it, and the flattering encouragement thus far received has only strengthened that determination. When we can put 25,000 copies of it—perhaps weekly—into the houses and hands of our most sterling population, and have it meet with a welcome, we shall feel that we have an acquaintance worth prizing, and a position where we can be useful if we would.

May the continued exertions of our kind friends, and our own unremitting exertions to constantly improve and perfect the FARMER, hasten the "good time coming," for which we are willing to "wait a little longer." If our good friends will continue to labor as zealously for us, during the remaining as through the first half of the year, we will be among the most grateful, and under the most weighty obligations.

Our State Legislation.—

Since the issue of our April number, the State Legislature, after a session of almost three months, have adjourned over till September, when we may look for another turn of about six weeks, making altogether almost half a year's legislation. Certainly a pretty liberal amount for a young State, costing in the aggregate not less than $100,000 to $150,000. Now in the way of legitimate, necessary legislation, what is the probable amount of benefit to be derived from it by the masses of the people? Out of probably 500 bills that will be introduced and most of them passed, not 50 of them relate to matters of general interest, and out of that 50 not ten will be passed into better laws than those they supersede. Out of the 450 local and buncombe bills that make up the balance, it is safe to assume that at least one half of them are individual or sectional projects, wholly uncalled for by the masses, and often dictated by the purest selfishness. Three-fourths of the whole 450 bills ought to be disposed of by the various County boards of Supervisors, and never be heard of in the State Legislature; and if there is not ample general laws for that purpose already, those are the ones that ought to be first enacted. Many of the acts are for the allowance and settlement of small accounts of from one to ten dollars against the State for some trivial service, and in their adjustment going thro' all the clumsy forms of legislation—of being read their three several times, considered in committee of the whole, referred to standing and select committees—being printed, engrossed, enrolled, and finally passed, after having gone through with all this rigmarole in both branches of the Legislature. Now, nothing further remains but to be signed by

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the respective presiding officers, and by his Excellency the Governor, except the printing with all the paraphernalia of head and tail, of official heading and certifying, making several folios of perfectly needless work, except to benefit the printer. By the time the foregoing proceedure is gone through with, the little bill appropriating four shillings and six pence to Peter Snooks, for scaring the birds out of the Capitol Park, is settled, although the operation has cost the State at least $50.00.

Such is the economy and wisdom of much legislation. It can easily be demonstrated that every moment during our ordinary Legislative session costs the State on an average $3.00 per minute, while in session. We have often wondered how dull, stupid men could while away a half hour in a speech of no earthly account, at an expense to the State of at least $100, yet nothing is more frequent than to hear young whiffets and old grannies thus wasting time and money. But when all is said, we have but to confess that we know of no remedy for such evils except in a higher standard of human wisdom, may be of honesty. They are fruits of slow growth, and we do not expect to see them ripen mature and perfect in a day or generation. Still, let us labor and act in the right direction, at each recurring election, and aim as far as possible to select men for legislators of real sound business views and habits—men who do not seek office, or aim to live in idleness on the industry of others. Elect as legislators that class of men that you would trust with your own private business and money, and none other. Regard not the party catch-words of demagogues—they have fooled the world already too long—but exercise your sound common sense in all public the same as in private matters, and when you do that we shall hear less complaint about public stealing, and long-winded, wasteful Legislative sessions—sessions that waste from fifteen to twenty thousand dollars upon worthless newspapers, public documents, and needless printing, that nobody reads, yet begrudges the smallest pittance appropriated to the interests of agriculture. In conclusion we would say that all we wish is, that such legislators had to derive their living from the fruits of their own labors, instead of the hard toil and sweat of the farmers, whose interests they seem to consider beneath their notice. But enough for the present.

Dane County Agricultural Society.—

It will be seen by reference to the proceedings of this society at their last meeting, on page 234 of the May number, that the Secretary was instructed to furnish each of the members of the General Committee with a copy of the constitution of the society, and that the said committee exert themselves in getting members of the society, and that they also enlist the assessors of each town whilst performing their official duties in the same work.

As the constitution and proceedings of the Society thus far, together with the new law granting aid to county societies, are all published in the late numbers of the FARMER, it occurred to us that the members of the committee and the assessors might at the same time get us lots of additional subscribers, as all those who become members of the Society will like to have its published proceedings for reference, and we shall make it a point to publish all its doings, premium list, awards of premiums, &c.

We send specimen copies to all the members of the committee, to use in canvassing for us, and hope to reap good returns for them. Shall we be disappointed? Our friend MATTS, of Verona, has got us twice as many subscribers as any other man in the county. If we had as good a friend in each town, what a list we should soon have; but unluckily there are not many such men.

The Conservator—

Is the name of a new paper from the Northern portion of the State, published by HARRISON REED, at Neenah and Menasha—properly but one town, but bearing two names—at the foot of lake Winnebago, on Fox River. From the number before us we should judge that Mr. REED has lost none of his tact in publising a good paper since he retired from the Milwaukee Sentinel a dozen years ago. May he meet with good success, and abundant support for his new paper. We fully endorse every word of the following, which we copy from the first number:

"THE VILLAGE PRESS.—There is nothing that contributes more to the advantage of a village than a well sustained and well conducted newspaper. It is the "home journal" of the inhabitance; the medium of intercommunication, and the index of the business and character of the place. We do not, of course, here refer to the hireling press that does the bidding of demagogues—the machine by which corrupt and designing men seek to establish themselves in place and power; but a press which regards the moral character of community and pursues a political and moral principle for sincere honest purpose. Industry, tact, character and some ability are required to make a popular, good and useful paper; and in addition a sufficient support is required to redeem it from pecuniary pressure and embarassement. An editor is subject to like infirmities of other men, but let him make his paper a proper one to be present in the family circle and let the business men habitually communicate fully and frequently through its advertising columns—let them sustain it with a liberal hand and it will return them four fold for every dollar paid."

Premium Lists for State Fair.—

We have plenty of extra copies of the April number of the FARMER, containing the Premium List, and we will forward them to any who may wish them. We hope all the friends of agriculture and utilitarian progress will be making their calculations to add all in their power to the attractiveness of the

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exhibition. Fairs are necessarily made up of individual contributions, hence it is the duty of all who can to contribute as much as it is their privilege to repay the labors of others. Swords are beaten into plow-shares, and spears into pruning hooks, in part at least, in our age and country; let us carry on the good work until it is as nearly so as human nature will admit of. It is a goodly thing, sociably, for the people of a State or county to occasionally come together, and make each other's acquaintance.

Prices of Produce.—

The decline in produce from last fall and early winter prices, is very great, and bids fair to be greater, permanently for the present, so far as human ken can reach. If the coming crops should be abundant, the vast area sowed and planted, under the impulse of long continued and remarkably high prices, would pile up an amount of grain for the fall market that might carry prices still lower. Still, some unlooked for turn in affairs may occur, to uphold prices above our expectations. With an average crop, Wisconsin will have 10,000,000 bushels of wheat to sell. What a pity that it cannot be floured at home, and the bran and shorts retained to feed our too often half starved stock, (during eight months of the year,) and to go back to our own soil again, which will ere long cry *peccavi* for want of it. Every flouring mill is a mine of wealth to the country; may they multiply and prosper.

Prices of Wool.—

Wool seems to promise pretty well, espepecially the better qualities. The uniform high prices of cloth, do not look like a decline, but rather to an improvement in prices. Good grades of three-fourths Merino ought to be worth, if clean and put up right, about 40 cents here at home, although may be a little less will have to be taken. As prices now stand, good qualities of wool will pay better than grain raising; and for all emergencies in a country like this, they should go hand in hand, with all farmers properly situated to attend to them.

Agricultural Warehouse.—

We omitted last month to call attention to the advertisement of SAMUEL R. FOX, which will also be found in this number. His catalogue is complete—comprising everything usually wanted by a farmer—and his prices are on the "live and let live" principle. Among the many new blocks in course of erection in this city is one by Mr. FOX—the dimensions of which are to be 26 by 100 feet on the ground, four stories high besides the basement. It is to be built of stone and brick, and finished in the most convenient style, to accommodate the growing business of an enterprising merchant.

The Improved Little Giant Corn and Cob Mill.

The advertisement of W. A. GRAY, for this excellent machine, will be found on another page. We have before us the account of two trials of the capacity of different machines for grinding, at both of which the improved Little Giant took the premium. One trial was made at Cincinnati in February last, between four machines and a committee of seven, comprising such men as GOV. WRIGHT, H. L. ELLSWORTH, of Indianna; S. D. HARRIS of the Ohio Cultivator, and ORIN SMITH, of Galena, awarded a silver service worth $250.00 to the Little Giant. In the Cincinnati Columbian of May 8th, appeared the account of a contest at Paris, Ky., which we copy:

"The undersigned, selected a Committee of Judges of the Bourbon County Agricultural Society, to determine the relative merrits (under rules prescribed for their guidance) of the Corn and Cob Mills of Messrs. Scott & Hedges, of Cincinati, named the "Little Giant," and of Messrs. Douglas, Smith & Co., of Zanesville. O., named the "Excelsior Young America, had a trial made of said mills in Paris, Ky., on the 5th and 6th days of March, 1856.

"The Little Giant in 100 revolutions ground 12½ bushels at an avarage draft of 460 lbs., by the Dianometer—the Young America, 4¾ bushels of meal at an average draft of 190 lbs.

"A half bushel of each mill was run through seives No. 4 and No. 6. The quantity of cobs left in the No. 4 seive was double by the Young America of that by the Little Giant, while the meal of the latter was of more uniform fineness than that of the former. Though the mills are of equal diameter, (twenty inches,) the grinding surface in the Little Giant is supposed to be five times grater than in the Young America. These tests, and an examination of the construction of the mills, led the Committee to the opinion that the Little Giant is the superior mill and best adapted to the use of the farmer, and they therefore award to Messrs. Scott & Hedges the two silver goblets."

Signed by Committee.

Woolen Factory.—

At Beaver Dam, Dodge Co., in this State, is located one of the most extensive Woolen Factories in the West, and from the uniform fair dealing of its proprietors, Messrs. STEWART & Co., they have acquired an unbounded confidence among their numerous customers. Read their advertisement, farmers, you who have fine wool that you wish made into cloth of the right sort, for your own use, and then, if not convenient to go personally with your own product, send it with plain, full directions, and it will return to you in the shape desired. We were at their factory a short time since—saw their carding machines and spindles doing their busy work, and heard the "rattling of the loom," until we almost thought ourselves transported to the "spindle city."

State University—Class in Agricultural Chemistry.—

Dr. E. S. CARR, Professor of Chemistry and Natural History in the University of Wisconsin, is just commencing a course of lectures on Agricultural Chemistry, and the application of science to the useful arts—to be continued through the summer term. These lectures will be delivered at the laboratory of the University, and are open to all

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—any one can join the class by paying $3. Let every one who can attend these lectures, as, coming from Dr. CARR, they cannot fail to be instructive and interesting in the highest degree. For ourselves, not a day shall we fail to be present when we can possibly leave our work.

Professor READ gives a course of professional instruction in the Art of Teaching, beginning the third Wednesday of May and running through the summer term.

The new arrangement for boarding the students at the University is working admirably. By trial it has been ascertained that board can be furnished to students for $1.75 per week. The high price of board heretofore has been a serious drawback to this institution; but this is now obviated, and we expect to see the University increasing its number of students rapidly.

Millinery and Fancy Dry Goods Store.—

Mr. R. F. POWERS has recently opened an extensive stock of Spring Goods at his store on Washington Avenue, Madison. His card will be found in this number of the FARMER, and anything not enumerated therein he will be pleased to show to any one calling on him. Milliners and country merchants will find it to their advantage to price his goods before going further east, as we think they will find terms that will save traveling expenses.

Arthur's Home Magazine.—

We have been in receipt of this valuable periodical for some months past, and consider it, in point of useful and interesting matter, surpassed by none. The literary talent engaged in it makes it a very desirable magazine for the entertainment of the home circle. It is ably conducted by T. S. ARTHUR and VIRGINIA F. TOWNSEND. Terms—$2 a year, in advance. 4 copies, $5. Address T. S. Arthur & Co., Philadelphia. A new volume commences with July.

Beaver Dam Nursery.—

The card of INGRAHAM GOULD, who has recently started a nursery at Beaver Dam, Dodge Co., will be found in the advertising pages. Mr. GOULD is a new comer to our State, and our best wish is that such men may rapidly multiply in our midst. He is a real live Yankee—the trees he sells are of very pretty shape—and if we err not he will soon rank among the first in his profession in the West.

Premium Field Crops.—

It will be seen by reference to the Premium List, on page 154 of our April number, under the head of Field Crops, that those intending to compete for premiums in that department will need to file a notice to that effect with the Secretary, by the 15th of June, specifying the crop or crops on which they intend to compete. As yet we have received but few such notices; but hope we shall, and a goodly number of them, too, by the aforesaid 15th of June. It is true our premiums are small compared with what is offered by some other States, but the premium should not be the object so much as the credit of being the best farmer in the State. We hope to see a good deal done in the way of improvement in field crops in the next few years.

Godey's Lady's Book—

For June is on hand early as usual, and is replete with the choicest productions of literature and art. This magazine has won for itself an enviable reputation among the ladies, and is always welcomed with satisfaction by its patrons. Its fashion plates are neatly executed, and are so reliable that they are generally adopted by the "bons." Its recipes alone are worth the price of the magazine to any lady who takes pride in getting up nice "fixins."

J. S. Fillmore, Land Agent, Milwaukee—

Offers for sale a lot of choice farming lands, located in Dane County—also a fine farm in Milwaukee County. See his advertisement.

MADISON PLOW FACTORY.

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel plows which we will sell cheaper than any other plow of the kind ever offered in this market.

We would also call your attention to our Breaking Plows, and we feel confident their equal cannot be found east or west, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

☞ TIBBITS & GORDON are the only Agents in Madison.

C. H. BILLINGS. S. H. CARMAN.
MADISON, Feb. 1, 1856. t.f.

RANDALL & JONES'

PATENT DOUBLE HAND

PLANTING MACHINES.

J. HERVA JONES, Inventor and Proprietor of the Patent for New York, Michigan, Wisconsin, Minnesota, and Northern Illinois.

OVER THIRTY First Premiums awarded—and over *Fifty Thousand Acres of Land Planted* with them in 1855! Twenty Acres of Corn have been planted by one man with one of them, in one day! I challenge any man, with any implement whatever, to a trial test—either on *time, quality* or *expense* of planting. I will give any person *Five Thousand Dollars* who will produce its *superior*. I have cuts and descriptions of a

NEW MARKER,

my own invention, which will *save much labor in cultivating*, and which I will mail free to all who purchase my Planters.

Rights and Machines for sale. Send for a Circular.

J. HERVA JONES.

ROCKTON, Winnebago Co. Illinois. Apr. tf.

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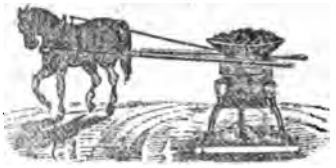
IMPROVED LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 23d of February last. A Committee composed of GOV. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $20 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill. It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

PRICE—No. 2 Complete, $45.00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $55.00, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

☞ All Communications promptly Attended to. ☜

WOOL! WOOL!

100,000 POUNDS OF WOOL WANTED at the FARMER'S FACTORY in Beaver Dam, Wis., to manufacture into Cassimers, Satinetts, Tweeds, all wool Flannels, or cotton warp Flannels two yards wide for sheets, plain or twilled, or in exchange for

CASH AND CLOTHS.

We have now more than 6,000 yards of the above Cloths on hand, besides nearly 1,000 superior all wool Horse Blankets. We wish to say that three years ago we arrived in Wisconsin, with machinery to make Woolen Cloths. We were determined to make only *pure Wool hard twisted, serviceable* Goods for the wool grower, at less cost to him than the poor stuff brought from the East, made of little wool, much old rags, flax and cotton, (the latter being the best part.)

As to our success, we have only to refer to those who have patronized us, and the unprecedented increased demand for our goods; so that we have greatly enlarged our capacity to manufacture cloths. Our Factory is now the largest in this State, and we are now making more than 1,000 yards per week. We have three Carding Machines for

CARDING ROLLS,

and can do that work in short notice. Custom Cloth Dressed at all seasons of the year.

We always return the same quality of cloth as the wool sent. All letters of inquiry as to the particulars will be promptly answered. Wool may be sent to us by Railroad, and Cloth will be returned in the same manner if required.

G. H. STEWART & CO.

BEAVER DAM, Wis., June, 2m.

CLOTHING.

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings—a Beautiful Assortment.

GENTS. CRAVATS

and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, MADISON. June, 1856. tf.

J. S. FILLMORE,

LAND, REAL ESTATE,

—AND—

COLLECTION AGENCY.

No. 2 Juneau Block, Milwaukee, Wis.

Mortgages Bought, Loans Negotiated, Real Estate sold at reasonable rates, Collections and Remittances

ATTENDED TO PROMPTLY.

FARMING LANDS

FOR SALE!

THE following valuable Tracts of Land, situated in the County of DANE, are offered for sale. Title indisputable, to wit

Description,	*Section,*	*Town,*	*Range,*	*Acres,*
S E qr of S W qr,	20	8	12	40
S W qr of S E qr	29	8	12	40
E hf of S E qr	31	9	12	80
S W qr of S E qr	31	9	12	40
N W qr of N E qr	6	8	12	40

Ozaukee County—W ½ of the W ½ of S W ¼ Section 4, Town 10, Range 22.

The above tracts comprise some of the best lands in those counties for farming purposes. For terms apply to

JOHN S. FILLMORE.

ALSO

A VALUABLE FARM

In the town of Granville, seven miles from Milwaukee near the Lisbon Plank Road, containing 80 acres of land, twenty acres of Timber, with a good Frame House, and one of the best Barns in the country. 100 Fruit Trees, a Good Well and Cistern. The land is of superior quality, and under a high state of cultivation; in fact, there is everything about it to make a home comfortable.

PRICE—$4,500. Apply to

JOHN S. FILLMORE.

MILWAUKEE, June, 1856. tf.

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SEYMOUR & MORGAN'S
PATENT IMPROVED NEW YORK
SELF-RAKING REAPER,
WITH MOWER ATTACHED!

ALL who have used a Reaper know something of the labor and skill requisite to rake off the grain in *good* bundles, and a *Self Raking Reaper* which should be simple in its construction, and durable, performing the work as well as the best hand-Raking machine, has been considered as a great desideratum, by all intelligent farmers. Such a machine is now offered to the farmers, and warranted to *cut* and *lay off* in *good* bundles from ten to twenty acres per day, with *one* man and a good team. The rake is *not* liable to get out of order, (like those of some other machines offered to the public), but is as durable as any part of *this* or any *other* Reaper. Among the important points of superiority in this machine may be mentioned—lightness of draught for teams, absence of side pressure, and width of cut 6½ ft. Made in New York of the best of eastern timber, it cannot fail to give satisfaction.

N. B.—Wet grain, grass or weeds form no impediment to the perfect working of the rake.

Price, delivered in Madison, $160,—$60, paid on delivering Reaper, and note given for $100, and interest due 1st Dec., 1856, which can be taken up for $95, if desired, after a fair trial in the harvest field.

Orders may be left at Fox's Hardware store, near the Court House. For circulars, descriptions, &c., apply to

apr-tf S. L. SHELDON, Madison, Wis.

Madison Agricultural
WAREHOUSE.
OF
SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constantly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,
Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns. Railroad & Garden Wheel Barrows, Road Scrapers. Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns.
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, 3, 8. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,

apr-tf At sign of Pad Lock, Morris Street.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS & STATIONERY,

BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT.

Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date, ... $1,874,284 00
Total amount of Premium Notes received, ... 21,500 00
do do Cash Premiums received, ... 1,454 00
do number of Policies issued, ... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and expenses paid to date, 9,871 40

Balance in favor of the Company Jan. 1, '56, . $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to Farmers and others wishing Insurance, a safe and reliable Company in which to insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:
B. F. HOPKINS, *Sec'y.* N. W. DEAN. *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS. *V. Pres.*

Directors:
L. J. FARWELL, N. W. DEAN, SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

Jan. tf. C. C. OLIN, General Agent.

Madison Steam Planing Mill,
AND
SASH, DOOR AND BLIND
MANUFACTORY,
CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6 by 6. 6. to 2.10 by 7 ft., 1¼ & 1⅜ in. thick, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great economy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.

MADISON, Wis., June, '56. tf.

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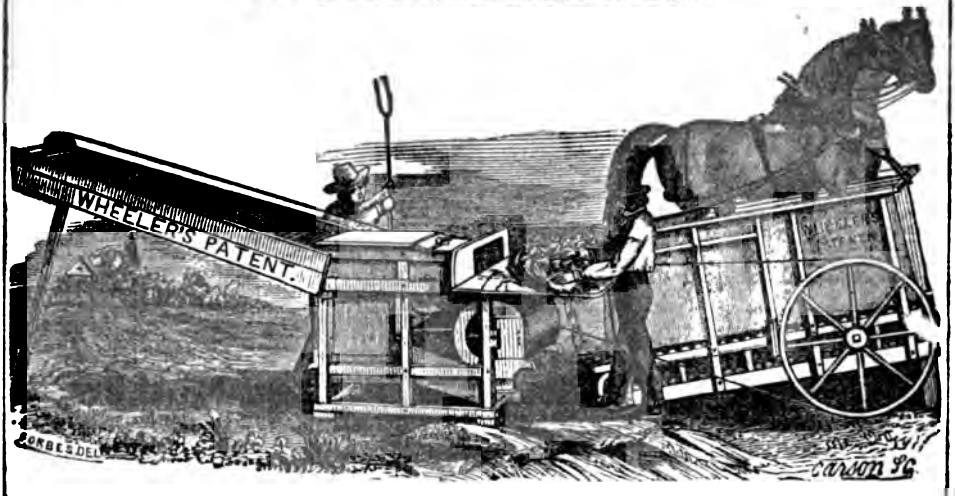
NEW YORK STATE AGRICULTURAL WORKS,

BY

WHEELER, MELICK & CO.



[*Double Power, and Combined Thresher and Winnower, in operation.*]

We are Macufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of Wheat or twice as many Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Overshot Thresher with Vibrating Separator.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price $160.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Combined Thresher and Winnower.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of Wheat and 800 bushels of Oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine. **Price $245.**

Also Clover Hullers, Feed Cutters, and Sawing Machines.

Our Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines, that admit of being driven by Horse Power, and our Threshers may be driven by any of the ordinary kinds of Horse Powers in use—either are sold separately.

☞ To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery 22 years, and have had longer, larger and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

☞ Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by the cheapest and best routes.

WHEELER, MELICK & CO.

MAY, 1, 1856. tf. Albany, N. Y.

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NEW MILLINERY STORE.

NO. 4, WASHINGTON AVENUE,

MADISON, WISCONSIN.

HAVING just returned from the East with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the LADIES to my newly selected stock of

Bonnets, Ribbons, Flowers,

and general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS,

SILKS AND CASHMERES,

together with an Elegant lot of Dress Goods. Also

YANKEE NOTIONS

in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis, June, '56. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

any house West of New York.

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promply and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,

L. A. WINCHESTER, WM. DeWOLF.

CURTIS' ONE PRICE STORE,

Will Remove,

ON OR ABOUT THE FIRST OF MAY NEXT,

TO WELLS' BLOCK,

(*Near Fox's Hardware Store.*)

R. T. CURTIS & CO.

Madison, April 15, 1856. mytf

BLOODED STOCK.

THE UNDERSIGNED offers for Sale 3 or 4 head of Full Blooded, Short Horned Durham Bulls—age, from one to five years—all capable of doing business the coming season.

The above Stock was purchased of the Best Cattle Breeders in the United States.

Said Stock will be sold on reasonable terms, and satisfactory Pedigree will be given.

C. S. BLANCHARD.

EAST TROY, Wis., April 14, '56. my. 1y.

BLACK HAWK HANNIBAL.

THE SUBSCRIBERS would announce to all interested in Breeding Good Horses, that the above named Horse, lately purchased in Vermont, may be found at the stable of T. C. Dousman, in Ottawa, Waukesha Co., on Mondays and Tuesday; at Palmyra, Jefferson Co., on Fridays and Saturdays of each week during the season, at the following prices, viz: Single service, $6,00; Season, $12,00; to Insure, $15,00. It is sufficient to know that Hannibal is of that Celebrated Breed of Horses universally known as the Vermont Black Hawks, which the subscribers can demonstrate by good authority.

PEDIGREE:

HANNIBAL was sired by Sherman Black Hawk, who could trot a mile in 2m, 36sec., and he by Old Black Hawk, owned by David Hill, of Bridgeport, Vt. Dam of Hannibal by Young Sir Walter, and he by Old Sir Walter —Old Sir Walter by Badger's Hickory, and Hickory by Imported Whip, and so through illustrious ancestors up to the English Eclipse and Darley and Godolphin Arabians. (See American Stud Book.)

HANNIBAL will be 6 years old in May, 1856, was bred in Bridgeport, Vt., by Dr. G. S. Gale. He is a jet Black, and weighs 1,100 pounds. He took the First Premium at the Addison County Fair when one year old, also the First Premium at the Clinton Co., N. Y., Fair, when two years old. He has never been trained for trotting—but when four years old trotted on Bennet's track, Vt., one mile in 3m. 7sec. He can show a gait at any time compatible with the spirit of the times.

N. B.—Good Pasturage for mares at customary prices. Single service and Season prices to be paid within the season, and Warrants by the first of March next. Mares parted with before foaling time, in all cases insurance must be paid, and also if not returned regularly to the horse during the season. There will be no variation in prices. Season ends August 1st.

C. H. BIRD,
A. ABERNETHY & } Proprietors.
C. A. LEWIS,

SUN PRAIRIE, April 20, '56. m. 2m

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. E. POWERS.

FRUIT TREES.

A CHOICE collection of Fruit Trees, Shrubs, Vines, Plants, Roses, &c., cultivated and for sale by A. G. HANFORD, at his Nurseries, Waukesha, Waukesha Co., Wisconsin.

Apple, Pear, Plum, Apricot, Peach and Cherry Trees —Grape Vines, Currants, Gooseberries, Raspberries, and Strawberries in variety—Pie Plant and Asparagus—Houghton's Seedling Gooseberry (tree,) North River, Antwerps and Franconia Raspberries, in quantity for market planting.

Careful selections, embracing a suitable proportion of Summer, Autumn, and Winter varieties, ripening in succession, will be made by the proprietor when desired.

March, 3m. A. G. HANFORD.

REAPERS AND MOWERS,

WITH ADDITIONAL

IMPROVEMENTS FOR THE HARVEST OF 1856.

First Grand Silver Medal

FOR the best Reaper & Mower at the Paris World's Fair Exhibition, 1855. Awarded to John H. Manny, and the machine purchased by Prince Napoleon for his estate in preference to all others. Several thousand of these machines are being manufactured with all their improvements for the next harvest, and warranted superior to any other harvesting implement, all orders promptly attended to, Address

MANNY & CO.,

Jan. tf. Rockford, Illinois.

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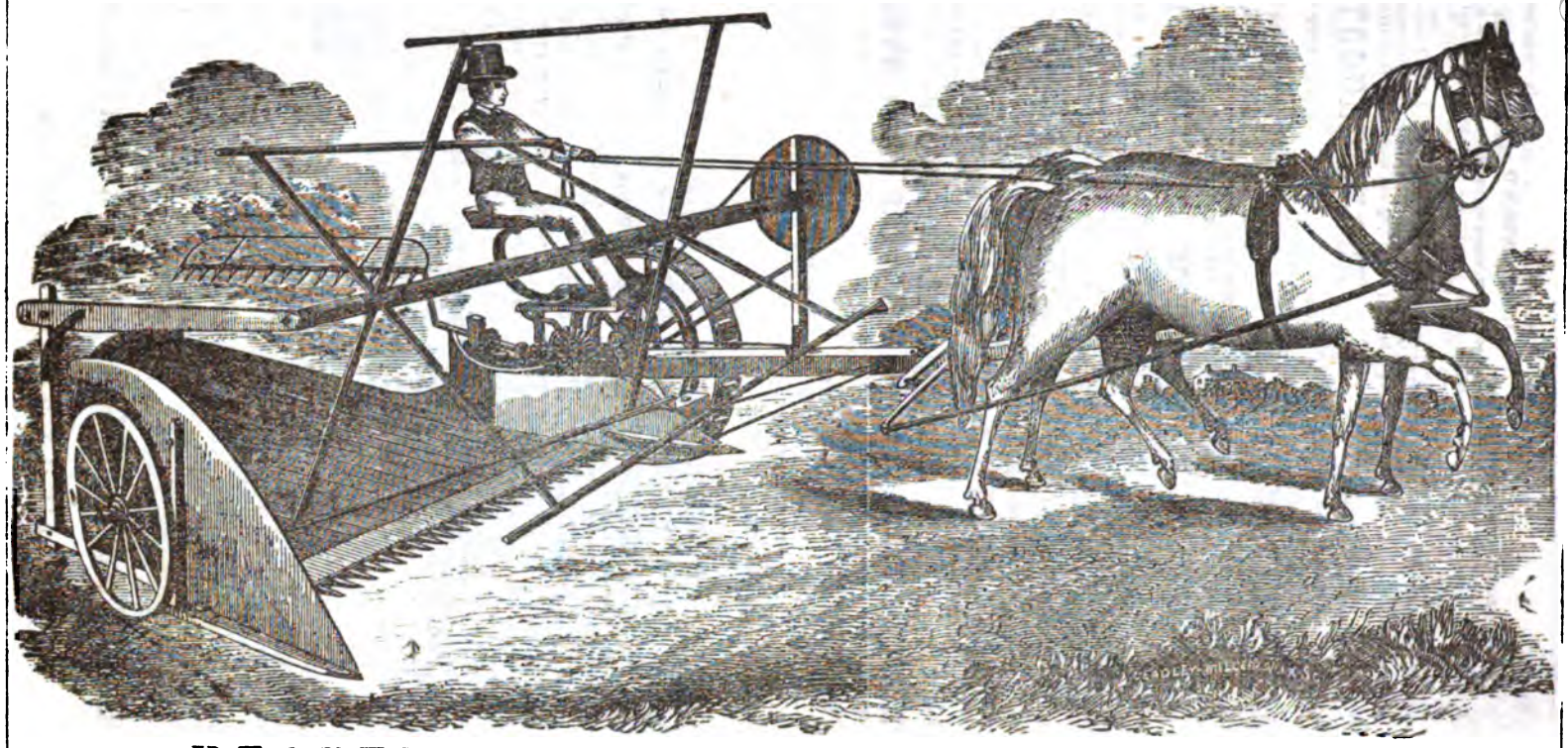
SEYMOUR & MORGAN'S

PATENT IMPROVED NEW YORK SELF RAKING



REAPER—WITH MOWER ATTACHMENT.

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MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Quince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Symligas, Calycarthuses, Enonymuses, Honeysuckles, Bignonias, Prairie and other Roses —Dahlias, Gladioluses, Tulips, &c., &c.

Vegetable Plants:

Tomato, Cucumber, Melon, Cabbage, Cauliflower and Egg-plants—the most excellent varieties.

FOREST, FARM, AND GARDEN SEEDS—I shall also keep *Locust, Osage Orange*, and the most important kinds of Nursery and Vegetable Seeds, for sale at the office of the *Wisconsin Farmer*, and I have made such arrangements with large dealers in Milwaukee, Chicago, Louisville and some of the eastern cities, that I can fill orders for *all kinds of Seed*, of the best quality, at short notice, and at the lowest rates. Many kinds of seed can be sent by mail without much extra expense. Any one sending 12 postage stamps will have a 2 ounce package of Locust Seed forwarded to him.

ORDERS left at the *Farmer* Office, or sent by mail, will receive prompt attention. H. F. BOND.

MADISON, Wis., Feb., 1856. t.f.

UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms—Begin:

1.—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.

COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT, do	do.	3,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz. Silver Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Riveted Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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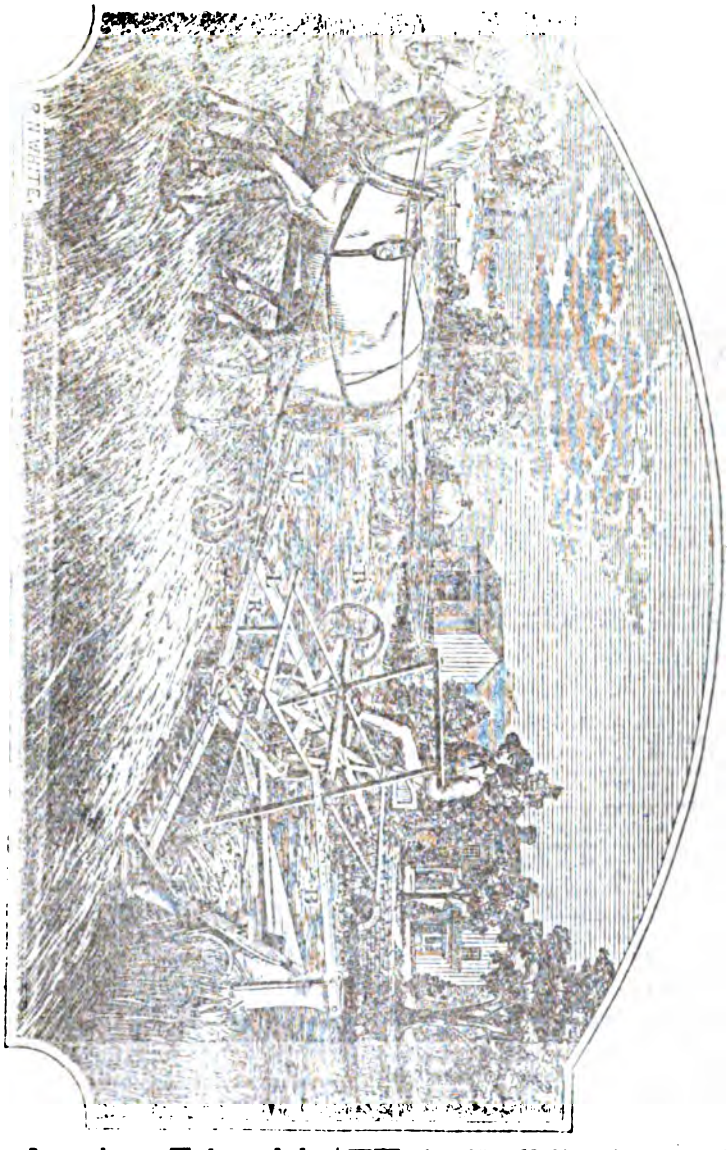

MANNY'S REAPER AND MOWER COMBINED—AS MOWING.

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent

ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation and ded, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - - $135
For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - - $145
For Single Mowing Machine, of about 5 feet cut - $120

Descriptive Phamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & Co., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices

AT THE WISCONSIN FARMER OFFICE.

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JULY, 1856.

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

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TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with January and July.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**

MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

ATKIN'S AUTOMATON,

OR,

SELF-RAKING REAPER AND MOWER.

1 (the first,) used in 1852.
40 used successfully in 1853.
300 in twenty different States in 1854.
1200 in all parts of the Union in 1855.
3000 building for the harvest of 1856.

THERE ARE SIX GOOD REASONS FOR THIS unparalled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of Raking. 3d. It saves at least another hand in binding. 4th. It saves scattering by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf and does not drop, in the after handling, and the heads are not exposed in the stack, so that the GRAIN saving even exceeds the LABOR saving. 5th. It is a good Mower, being one of the best convertable machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 8 years) of OVER SEVENTY FIRST PREMIUMS!

PRICE.—REAPER AND MOWER, $200,—$75 on its receipt $75 first September, and $50 first December. Price of SELF-RAKING REAPER, only $175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discount for advance payment.

To secure a Machine, order immediately. Though so little known the past season, and none ready for delivery till 1st May, yet not two-thirds the customers could be supplied. The reputation of the Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand, as twelve hundred did last year, and we shall also be selling four months earlier.

☞ Order early, if you would not be disappointed.

PAMPHLETS giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants and prepaid.

☞ Write to us at CHICAGO, (Ill.,) DAYTON, (Ohio,) or BALTIMORE (Md.,) whichever is nearest to you.

J. S. WRIGHT & Co.

1865, Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., JULY, 1856. NO. 7.

SUGGESTIONS FOR JULY.

"The mother lark that is brooding
Feels the sun on her wings,
And the deeps of the noonday glitter
With swarms of fairy things.
From the billowy green beneath me
To the fathomless blue above,
The creatures of God are happy
In the warmth of their summer love.
The infinite bliss of Nature
I feel in every vein;
The light and the life of Summer
Blossom in heart and brain."

Bayard Taylor.

July is not a month presenting so many positive duties as some of the earlier or later months. Still it furnishes plenty of subjects for attention and labor. We noticed a world of weeds in some cornfields that we lately passed. This, as we have before said, is the worst possible policy, as every weed that goes to seed this year, will furnish seed for a hundred or a thousand next; besides greatly checking the growth and product of the corn. Every one who possibly can, should brush through his fields some of the hot, wilting days of this month, and make clean work of it, before the seeds are ripe. Clean fields praise the owner, whilst weedy ones reproach him. In this connection we would advise all to carefully inspect all the corners and by places about their fields and buildings, in search of thistles, burdocks, and other more outlandish weeds, that are always crowding in. No such thing should be allowed to get a foot hold. A single ripe thistle will scatter its downy seeds over hundreds of acres. So much for weeds; they are the bane of the farm and garden, and accumulate faster even that a usurer's interest. Careful watch should be kept when grass seed brought from other countries is sown. It often contains the most noxious weeds, and not unfrequently Canada thistles. These fruitful western soils will rapidly multiply all those eastern evils when once they get a foot-hold. Therefore let all watch and work and be on their guard, that our wool may be without burs, and our oats and hay without thistles as long as possible.

July, especially all the earlier part of the month, is still a good time for breaking, but perhaps the declining prices of produce will rather curb the desire for enlarging fields. Still every farmer should keep plowing, that he may stock down his fields already cultivated to grass; for every farmer will become more and more conscious of the indispensable necessity of the cultivated grasses, both for hay and feed. The wild grasses of this country do well for a beginning, but they are a poor dependence for good permanent farming. It is high time our farmers began to study the theory and practice of a proper rotation of crops. The careless crop upon crop system will not long answer our purpose. Even our fine soils will soon decline under it.

The thus far too common notion that manure is a useless article, will soon be abandoned, and it will be found here as elsewhere, that all manure accumulating about a farm is but a part, and an all-important part of the soil—one that must be returned to it regularly and carefully, or impoverishment necessarily and certainly follows.

As much haying as possible should be done before the wheat harvest. All cultivated grass should of course be cut at just the proper stage of ripeness, and much marsh hay is vastly improved by being cut early, especially if of a tough and wiery nature. Marsh hay should not be allowed to bleach too long in the sun and rain, but by the time it is handsomely wilted, it should be put up in neat snug cocks of 100 to 150 lbs. each, and allowed to stand for a week, in which case it undergoes a kind of fermentation that causes it to keep well in the mow or stack afterwards. More than half of the marsh hay heats and half spoils in the stack for want of this precaution.

Four quarts of salt to each load, scattered in and about the more central portions of the mow or stack, is a valuable investment.

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Those who will take this precaution, and stack it nice to shed the rain, will find it a great improvement and one that will be amply shown by the condition of the stock that is kept upon it.

Before the issue of our next number harvest with all its extra labors and hurry will be upon you. Are you planning to be all ready for it when it comes? Have you got all your necessary help engaged, and that of the right kind? And the best help you can have, if your fields are smooth and of the right kind, is a good reaper. It will travel over your fields with a business like expedition, that makes harvesting as easy a matter as any other part of farm work. We gleaned our fields last year with a horse-rake after they were cleared of the shocks, and found it a profitable investment of labor.

The stacking of grain as it should be is a matter that very few understand. Two objects are requisite—the first to have it shed rain well, and the next to have the stacks so placed as to be convenient to thresh. Both of these matters require nice workmanship and calculation.

Stacks should be placed in twos or fours, so that the sheaves from all of them can be pitched conveniently to the platform of the machine, which needs just space enough between them to occupy a central position. If any new beginner is at a loss to know how to best place his stacks, in conformity with the above suggestion, let him talk and advise with some more experienced thresher, or farmer, and he will find it will pay him well for the trouble. The trouble of moving the machine often, or of twice handling the sheaves, is accompanied with no small additional expense and waste.

Stacking is not usually done with as much care as should be used, especially considering the severe, driving storms that often occur, even in the early fall months. It is very common to see *something green* about the tops of the stacks after the fall rains. Our experience has taught us that it is a good plan to top out the stacks with marsh hay, which, by the way, is almost as good as shingles to shed rain. On the other hand, it is almost impossible to make them water proof with bundles, especially after they have been blown about by the wind. Farmers, try the marsh hay covering, and avoid the nuisance of grown and spoiled wheat. It will save money and help our general reputation as a wheat growing State. Of what use is it to raise large fields of grain, unless it is well harvested and saved? All grain should be cut as early as it will do, as the berry is usually more plump, and the straw a great deal better. Oat straw early and nicely saved, is half as good as marsh hay, for any kind of stock—especially if it is not threshed too clean.

Look carefully after the newly planted orchard and garden during these hot, dry months of summer. Unless your trees are well mulched, and watered even, if it is very dry, they will be found not unfrequently to wilt and die. Then the worms and other vermin, keep a constant eye on them; a nest of worms will completely defoliate a tree in a day or two.

Those who rise at four o'clock in the morning and labor a couple of hours in the garden, even ladies, will find it a more delightful season than any other in the day—a season replete with charms of various kinds, which must be enjoyed to be fully appreciated.

Then the results of such systematic and regular labor, in the way of weeding and mellowing the soil, of watering, staking, and fixing, will be found to be surprising. Garden vegetables, shrubbery and fruit trees, require as much attention as children, and will show a good bringing up as readily. There is this difference, however, the one thrives best from the frequent application of dirty water, whilst clean water is most congenial to the other.

Two hours thus daily spent, or even one hour, will work miracles in the way of a fine garden—praising and paying for all the labor twice over at least, besides all the health promoting influences, and natural poetic inspirations of the occasion. Altogether, it is a profitable investment, and we advise all who can to try it. A barrel, near the back door, kept full of suds and slop water, to be often applied, is the thing for all the world for every kind of vegetable. The best remedy against bugs and worms is to kill them, wherever they can be found.

During this warm season of the year, it is of the first importance to preserve good health, and to do this it is highly essential

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to keep as cool as possible. To begin work early and to work late, taking a good long nooning in the middle of the day, during which time it is not well to keep hired men wagging at some small chores, for fear they will not earn their wages; but as far as possible let them lay in the shade and rest.—. Then when the regular work does again commence, every man will feel fresh to pitch into it with a will, and do good justice to all.

We know some men who deem themselves good managers, who always make it a point to keep hired help wagging from four o'clock in the morning till nine at night, and without much care either as to their meals or comforts. This they consider economy; but we differ with them in opinion. We believe the true way to treat help of all kinds is as we would wish our own sons and daughters used in a similar case, and that it will usually be appreciated even by the lowest. We recommend to all to try the system of kindness, and it is safe to conclude, that those who do not appreciate it, are not desirable help to keep longer than we are obliged to.

CALIFORNIA—NORTHERLY WINDS.

Northerly winds are a peculiar feature of the spring and summer seasons of California, and at times have a highly injurious effect on the growing vegetation. They lower the temperature rapidly, bringing in heavy fogs on the land from the sea. From the rapid reduction which they cause in the temperature, in the course of half an hour the thermometer will often fall ten or fifteen degrees. These winds dry up the moisture of the ground with wonderful rapidity. They attenuate the air to such a degree that frosts are easily induced late into the summer months. When the traveler is caught on any one of the great plains of the country while this wind is blowing, it renders the skin very dry; the eyes, the nose, and the ears are unpleasantly affected, and in the whole system is produced a most unpleasant feeling.

A Great Artesian Well.—A new Artesian well has recently been opened near San Jose, California. The pipe is two feet in circumference, and the water flows up through it to eight feet above the surface. It rushes up with great force, and with a noise that is heard at a mile distant on a calm evening. It sends forth a thousand gallons per minute. Artesian wells are designed to be the great fertilizers of California.

For the Farmer.

HARVEST MONTH.

"Of all months in the calendar I wonder if there's any which the farmer's wife would so gladly overleap as *this*, with its *haying* and *harvesting*," exclaimed Mrs. Manning, as she threw herself into an easy chair in her cozy little parlor.

Her young city visitor looked up with astonishment at this expression. "Why, cousin Ellie, how prettily I live here. I didn't know that I should like the country so well. I'm no epicure, but what a breakfast you had this morning! You must have an excellent cook."

Mrs M. laughed heartily, but only said that breakfasts in the country can be delicious—but they don't come on the table by the aid of invisible hands. She didn't tell how two hours earlier an equally *troublesome* but more hearty breakfast was prepared.

"How beautiful it is now!" exclaimed the visitor, as she sat in the vine draped porch—the moving zephyr rustling the leaves and blossoms, and playing with her curls as she bent over her embroidery. Looking up, "How I love to watch the mowers in the field!—how prettily their white sleeves and straw hats look! how gracefully and easily they swing the scythe in concert with each other! how lightly the rakers draw together the fallen hay, top it over, and pile it up so prettily! What pleasant work it must be! How deliciously sweet the air! I've a mind to run down and enjoy it with them."

"Oh, do come, cousin Annie," exclaimed Willie and James—"it will be such fun?

"And then we'll go over to the orchard and get some apples. The Harvest apple and Red June are already ripe, and there are plenty of Antwerps in the raspberry patch."

"Mother, can't we take a basket of lunch for cousin and us—down under the great elm? Give us cream and sugar, mother, for our berries!"

"Yes, indeed I will; and when the sun grows hot go over by the brook in the shade. There are beautiful flowers over there—now be sure and keep cousin Annie away till the *second* dinner bell rings!

"Now, I've rested a few minutes, and must away to duty again," said Mrs. M. to herself; "six hearty harvesters to cook for and a large family besides. My hands are needed.

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We can't get too much, for they are a hungry group—both great and small—thanks to fresh air and plenty of *exercise*. But if haying and harvesting would only come in cool weather—it's trying for Mistress and maid, these great bakings, and boilings, and fryings—over the hot stove. And then there's so much else to be done in this mid-summer weather; extra care is needed to keep the whole house cool and neat. In pantry, cellar and kitchen, the careful housewife's active presence is constantly needed. Children require extra care—heated, and dusty and fretful with out door play, they come in to be washed and cooled, and rested, and then are impatient to be out again. And little is there in the influence of July's sultry air to promote brisk activity.

"But one mustn't stop to cogitate, *action prompt*, is the motto now. Two dinners over, half an afternoon's work to clear up—the great ironing not yet commenced, and here it is Wednesday. An early hearty supper is to be prepared ere one is half rested."

"Dear me! cousin Ellie, what are you doing?" asked Annie who, tired of making boquets and garlands in the porch, and listening to the birds, and frolicking with the children, found her way to the housekeeper's back "sanctum."

"Helping to get supper, Annie."

"Supper! for what—for who? What kind of suppers do you get here?"

"Never mind; go back to the parlor. To-day you are in ecstacies with country life—to-morrow I'll begin to *educate* you for a farmer's wife. You must be up by four o'clock; no tarrying to sentimentalize over the glories of sunrise—or bird melody, or dew-spangled lawn and flowers. You may enjoy them at odd moments if you find any in kitchen and dining room."

"Why, Ellie, you didn't get dinner for all those people?"

"Certainly. We furnish them with 'board and feathers;' you don't suppose they live on air?"

"I didn't *suppose* anything about it—only that they added to the *picturesqueness* of the landscape. Well, I change my mind. I shan't set my cap for that spruce young farmer who politely brought me over from the station last night. I should make a most miserably inefficient farmer's wife, I'm beginning to think."

"No you wouldn't. You only need a little training and a mind and heart to enter into the *spirit* of the occupations that will devolve upon you. Besides, young Mr. B. is one of the progressive farmers. Farm life is already divested of much of the drudgery of former times—and the time is fast coming when, for women especially, its burdens will be far lighter, so that even you need not shrink from it as from a life of toil."

"How, cousin Ellie?"

"Ah, I'll tell you that another time—now we must haste with the supper."

ELSIE.

WAUKESHA, Wis.

EXTRAORDINARY YIELD OF CORN FROM BROADCAST SOWING.—Major W. S. Mellinger, near Monongahela City, Washington county, informs us that about the first of May he sowed 1 3-4 bushels of corn (broadcast) on one acre of ground, intending to cut it up for fodder. Finding in the summer that it was growing about as rapidly as his corn planted and worked in the usual manner, he concluded to leave it to mature. When the time for harvesting arrived, he found it to yield 150 bushels of ears of good corn, and 5 tons of fodder. He says that he had besides about 30 bushels of nubbins, not counted in the above. If such results could always be anticipated from sowing broadcast, we see no reason why corn intended for feeding purposes should not be planted in this way or in drills, (which would be more scientific.) It would not do, however, to rely upon this kind of planting for seed, as we think there is no doubt but it would degenerate in its originality. We suppose, however, that no reliance could be placed upon this mode, except when a wet season like last summer would prevail, or when the land could be properly irrigated.

[Western Agriculturist.

THE IRON OF THE WORLD.—The annual production of crude iron throughout the world is estimated at 6,000,000 tons. Of this Gt. Britain produces 3,000,000, France 750,000, Prussia, Austria, Belgium and Russia about 250,000 each, Sweden 150,000, the United States 750,000, &c.

ANTIQUITY OF COW TALK.—"Koh! koh! koh!" ejaculates the milkmaid when she calls the cow. It is somewhat remarkable that the Persians, more than two thousand years ago, used the very same word for the same purpose—to call their "moolies."

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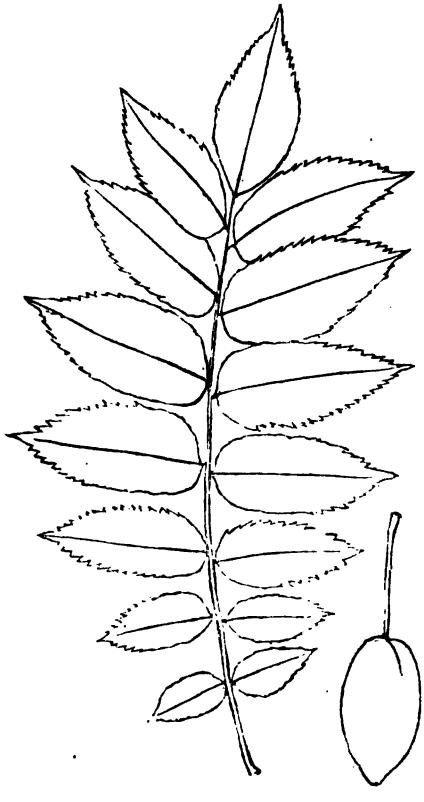
THE FOREST TREES OF WISCONSIN,

BY I. A. LAPHAM.

No. 30.—*Juglans cinerea*, of Linnæus—Butternut. White Walnut.—The Butternut is far less common in the woods of this State than the Black Walnut, next to be noticed, and its wood is less valuable. It has however some very desirable qualities, rendering it worthy of attention. It is useful on account of the medicinal virtues of the bark; and the sap affords an inferior kind of sugar. The nuts should be gathered for pickling in the last week of June; and for winter use in September. This is the appropriate and agreeable business of the boys, who can thus supply themselves and their friends with luxuries at the same time that they are having a "fine time" in the woods. The nuts are much esteemed, and command a good price in the shops.



30. *JUGLANS CINEREA*—BUTTERNUT. WHITE WALNUT.

The forms assumed by the Butternut tree are usually not those of beauty, being ill-shaped and uncouth. It is therefore seldom used as an ornamental tree alone. When planted with other trees it gives interest by contrast to the whole. The wood is very durable and may be advantageously employed for posts, rails, sills, shingles, and other things that are to be exposed to the weather.

We give above (figure 30,) a leaf and the fruit, both reduced to one-fourth the natural size.

No. 31.—*Juglans nigra*, of Linnæus—the Black Walnut.—This very common, well known, and valuable tree abounds in the eastern parts of Wisconsin, or in those portions of the State that are "heavily timbered." Large numbers are annually cut into logs, and used for cabinet-work, and for the inside work of houses. Like the Butternut the wood of this tree is durable, and may be used for posts, rails, &c. Fence posts are known to have retained their strength for twenty-five years. The nuts are usually deemed inferior in delicacy of taste to the Butternut.

As an object of beauty for the adornment of our houses, public grounds, streets, &c., this tree cannot be too highly esteemed. On this point no one is better authority than the late lamented Downing, who says:—"When full grown it is scarcely inferior in the boldness of its ramifications, or the amplitude of its head to the Oak or the Chestnut; and what it lacks in spirited outline when compared with those trees, is fully compensated, in our estimation, by its superb and heavy masses of foliage, which catch and throw off the broad lights and shadows in the finest manner. When the Black-walnut stands alone or on a deep fertile soil, it becomes a truly majestic tree; and its lower branches often sweep the ground in a pleasing curve, which gives additional beauty to its whole expression. It is admirably adapted to extensive lawns, parks and plantations where there is no want of room for the attainment of its full size and fair proportions. Its rapid growth and umbrageous foliage also recommend it for public streets and avenues."

The flowers expand in May, but the fruit is not ripe until October. Young trees may be transplanted from the woods, or they may be grown readily from the seed.

No. 32.—*Carya alba*, of Nuttall—Shag

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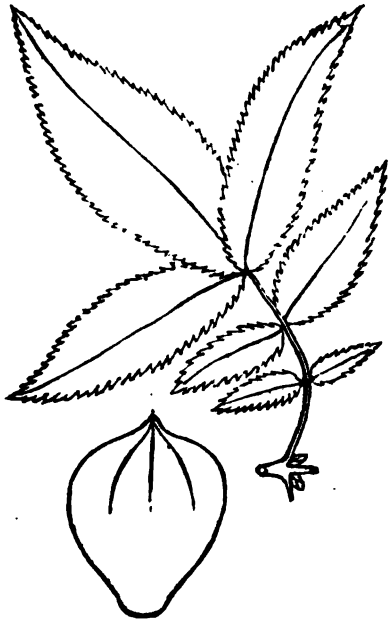
Bark Hickory.—The Hickories were first separated from the Walnuts, and a new genus established to receive them by Mr. Nuttall. Formerly they were all included in the old genus *Juglans;* but the least examination of the outer covering of the seeds or nuts will show the propriety of the new nomenclature. In the Walnuts it is undivided and remains attached to the nut, while in the Hickories it is divided into four valves, and falls away when ripe.

The Shag-bark Hickory may be readily distinguished from the other Wisconsin species by the loose, scaly exterior bark. It is one of our most valuable trees; especially for fuel, for which purpose it is not exceeded in value by any other. As the result of careful experiment, it is found to yield twice as much heat per cord as the Red Maple, White Birch, Butternut, and Pine; and one half more than the Sugar Maple, Beech, Red Oak, Pin Oak, and Elm. The great strength and elasticity of the wood make it desirable for a great variety of purposes.

The Hickory is also very fine ornamental tree, that should be much more often seen about our houses and public grounds. The difficulty of transplanting it, is probably the principal reason why it is not more often used for such purposes. It grows very rapidly from the seed, and one could very soon obtain a supply by planting at the places where the trees are to grow. The flowers are out in May, and the nuts are ripe in October.

No. 33.—*Caya glabra*, of Torrey—Pig-Nut Hickory.—This very common species of Hickory was described by Michaux, under the name of *Juglans porcina*, but the specific name *glabra*, having already been given to this tree by Dr. Muhlenberg of Pennsylvania, must, in accordance with the just rule adopted among authors, be restored to it. While it falls but little behind the last species in value as fuel, it possesses some qualities in which it is the most useful of the two. Both are quite abundant in our State, not only in the thickly wooded districts, but extending into the "openings," forming what are often known as "Hickory groves." Like the common Hickory-nut, the flowers appear in May, and the nuts ripen in October.

The following figure (figure 33,) shows the fruit of the full size, and a leaf reduced to one half the natural size.



33. *CARYA GLABRA*—PIG-NUT HICKORY,

The Walnuts and Hickories belong to the same natural family, called *Juglandaceæ*.

There are four other species of Hickory found in the neighboring States, but not yet detected in Wisconsin. They are

1st. *C. sulcata*, Nutt.—Thick Shell-Bark Hickory, found in Ohio. It resembles the *C. alba*.

2d. *C. tomentosa*, Nutt.—the Mockernut, or Great Ohio Walnut, which is found in Ohio and in Illinois;

3d. *C. amara*, Nutt.—Bitter-Nut, known as its name implies, by the bitterness of the nut, by its thin shell, &c.—found also in Ohio and Illinois; and

4th. *C. olivæiformis*—the Pecan-Nut—which is found in the southern part of Illinois.

AGRICULTURE is the appropriate employment of declining years; for it may be pursued to the very end of life. Not so with the occupations of professional men, for they will find that when the strength of their days is gone by, that younger and stouter rivals will hasten their descent, as they are traveling the downward slope of hostile rivalry.

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CARE AND STUDY IN FARMING.

There is hardly an occupation among men in which the extremes of careful and of careless management are more widely separated than in the profession of Agriculture; and as a natural result, the labors of agriculturists meet with every grade of varying success from failure to fortune.

If the lack of activity and enterprise which marks thousands of farming districts, in almost every part of the country, were suddenly transferred to a commercial city, and made to pervade it from beginning to end, men of business would be compelled in one year to shut their doors and put an end to their vocations! Bankers, brokers, tradesmen and dealers would be driven into bankruptcy, and a financial panic would ensue. If any single manufacturing or mercantile business should receive the shock of so much mismanagement—or of what is often worse, the *neglect of management*—as agriculture is continually experiencing, *it could not live a year*. This is not a statement ventured without knowledge. It is based upon the foundation not only of our own personal observation, but upon the experience and the statements of hundreds of competent witnesses all over the country.

The business of manufacturing and of trading is carried on with skill, carefulness, and economy; for they who engage in it know that they must be shrewd and cautious, or they will fail and be ruined. The business of cultivating the soil, as a general rule and which admits too few exceptions, is conducted in a manner so loosely, uneconomically, and even indolently, that Nature which affords the materials of agriculture, though it is really richer than Art on which manufactures chiefly rely, will not yield her fruits with so great abundance, or so rapid increase.

The true farmer is—not a *nobleman*, but what is better, a *noble man*. He is a man not only of honesty and integrity, but of industry and enterprise. He is a man of sagacity, and so of prudence; of observation, and so of experience.

But how many farms can be counted which represent such farmers? When an artist paints the picture, or a story-teller sketches a pen-portrait of a farmer, does he bring out the idea of such a man? The habits and practices of a large class of farmers would afford almost exhaustless resources of caricature, both for the pencil and the pen. A stout good-natured brown faced man smoking a pipe, or rolling a cider barrel, or feeding a Shanghai, or cutting name and date upon a tortoise, or fatting a pig!

But the pursuit of agriculture has in it an inherent nobility which should be impressed upon the minds of all who engage in it, never to be forgotten. Every farmer should have an abiding consciousness of the dignity of his profession. He should set before him an elevated ideal of the capacities and possible developments of agriculture, and should strive to realize in the results of his own labors, more and more successful embodiments of his ideal. The study of agriculture, embracing as it really does, the wide range of soils, grasses, plants, trees, fruits and flowers, affords a scope for the exercise of judgment, taste and skill, hardly inferior to the great field of Art—if indeed agri ulture, whose great aim is the development of nature, can be exceeded in comprehensiveness by art, whose province is to idealize and imitate it.

Agriculture summons more sciences to its aid than any other common pursuit. Its roots extend into almost every field of learning. It levies a simultaneous tax upon chemistry, geology, mineralogy, botany, meteorology, and upon all the arts and sciences that blend with these. It is therefore most successfully pursued only when diligently and deeply studied. Theories of practice, without practice itself, are rife everywhere, and in almost every profession. But agriculture, as it is pursued by a majority of farmers, is a *practice without theory*. Yet nothing but great research into physical laws will develop its full capacities, which as yet are only meagerly measured and understood.

A man may plant corn in the spring, and in due season gather the crop into his barn, without having ever read a book, or even knowing the alphabet. Yet knowledge—and such knowledge as can be conveniently imparted only by books—is necessary to an intelligent understanding of the various influences of atmosphere, sunlight, rain and soil, which operate to cause growth. Many things may be done ignorantly and yet successfully.

Carefulness of cultivation will do much, but it will not compensate for want of information and intelligence. What then must be the results, in such a comprehensive occupation as the cultivation of the earth, of careless practice *without knowledge!*

The two great lacks in agriculture, as it is ordinarily practiced, are requisite *information* and *carefulnes*. But the most pressing and immediate deficiency is the latter, the remedy of which cannot be too strongly enforced upon the attention of farmers and cultivators everywhere. Heedfulness may take a sure step towards success; negligence walks slip-shod to poverty. [Independent.

Tart words make no friends: a spoonful of honey will catch more flies than a gallon of vinegar.

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STATISTICAL FACTS IN AGRICULTURE.

The Indian Corn crop for the year 1855, was six hundred millions of bushels, which, at sixty cents, gives us the sum of three hundred and sixty millions of dollars, exceeding by more than one hundred millions the value of the wheat, and by about two hundred millions the cotton crop.

The Indian Corn crop is of the highest worth in a domestic point of view, while in a foreign aspect the cotton, although less in actual value, is the most beneficial.

Our immense consumption of foreign silks, dry goods, hardware, wines, and other luxuries, brings us largely in debt to foreign nations, and this obligation can only be entirely discharged by our cotton, since our remoteness from the European markets, the bulky nature of the cereal productions, and the productiveness of Western Europe, debar us in a measure from the advantages of European markets.

Yet, although we thus extol the cotton crop, we must not be understood as disparaging our cereal products—they are of our necessities—they embrace the elements of life, and in their importance do not give place to the results of our cotton fields. A short corn crop is felt in every department of our country—since men and animals must then be sustained in part by the other grains, and thus we are involved in the exigencies of a famine.

We learn from a statement made by Mr. Mechi, that one horse consumes as much food as would sustain eight men. In our country we find that the value of the oats, hay, fodder, and pasturage for the year 1855, was about three hundred and seventy-one millions of dollars.

What a vast amount devoted to the support of the brute creation, and what an immense number of domestic animals we have dependent upon us!

They are turning a great deal of attention in England to the use of steam in farming, and it is to be hoped that the time is at hand when success may be attained, and our heavy farm work be performed by machinery, to relieve us from a large part of this devouring army of horses and oxen.

The day will come, we doubt not, though it may be deferred, when the forces of nature now unemployed, will exert their highest energies for man's welfare.

That man must earn his bread by the sweat of his brow, we know; yet we believe that Providence has so constituted him, that the elements shall be his servants, and that the intellect will be so strengthened as to enable him more completely to bring them under subjection. One of our greatest wants in this country,' is that of farm laborers; men are scarce—when we want them the most, they cannot be had, but when not needed, they seem abundant. Machinery will produce an equilibrium, and thus by its certainty of action give us a greater certainty in results.

We find that but five thousand pounds of silk cocoons were produced; we hope, notwithstanding former failures, that this culture may be extended, until our own country can supply herself with this luxury, which, from the universality of its use, rises almost to the dignity of a necessity. We have in our extended country, climate and soil well adapted to this production, while the care of the silk worm forms an interesting, light and profitable employment for farmer's wives and daughters.

The day will come when the foreign demand for our cotton will be diminished, by reason of the production of that article in Southern Europe and Western Asia, then we shall be unable to pay for imported silks in the quantities by which we now consume them, and then, if we can supply the want of these beautiful fabrics by home production, we shall be able in a great measure to compensate for the loss of our foreign cotton market. [W. D., in the Working Farmer.

BENEFITS OF AGRICULTURAL FAIRS.

Every thing from the lips or pen of Daniel Webster still continues to be read with interest. The following is an extract from an address of his, delivered at the annual fair of the Norfolk Agricultural Society, at Dedham, Mass., in the year 1849:

"The principle of association—the practice of bringing men together bent on the same general end, uniting their intellectual and their physical efforts to that purpose is a great improvement in the present age. We saw it years ago—perhaps I might say centuries ago. It began in the corporations of the old world. It began in the professional associations of the world—in the legal, the medical, and the theological. But it was long, in that country and in this, before the principle of combination came to be acted upon in the great system of Agriculture—before it was brought to that pursuit of life which is the main pursuit of life—before agriculturists were brought to act in unison. And the reason is obvious. In the city, communities strive together. The merchants and ship owners can come together at the sound of a bell. The mechanics, generally, living in populous places, may do the same. They have the opportunity of interchanging sentiments every hour, and what one knows, all know, and what is the experience of one, all soon become acquainted with. But the agricultural population is scattered over all the fields of the country. Their labors and their toils are, in some degree, isolated.

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They are in the midst of the hills and the valleys and in the recesses of every solitary forest. There is no 'Change' for them to assemble upon at noon. There are no coffee-houses, there are no Atheneums for them to meet at in the evening and converse on their interest.

"It has, therefore, become essential to the best interests of the farmers of the commonwealth, that these annual fairs should be established, and that they should be universally attended. And, as His Excellency, the Governor, has remarked, it is not so much on account of what is to be learned by the most eloquent discourse in the public houses, or at these establishments, as from the meeting of men together who have the same general object, who wish for improvement in the same general pursuits of life that they may converse with one another—that they may compare with each other their experience, and that they may keep up a constant communication. It is in this point of view, that these annual fairs are of importance.

"Why, gentlemen, every man obtains a very great portion of all that he knows in this world, by conversation. Conversation, intercourse with other minds is the general source of most of our knowledge. Books do something, but every man has not the opportunity to read. It is conversation that improves. If any one of us here to-day, learned, or unlearned, should deduct what he has learned by conversation from what he knows, he would find but little left, and that little not of the most valuable kind. It is conversation—it is the meeting of men face to face, and talking over what they have common in interest—it is this intercourse that makes men sharp, intelligent, ready to communicate to others, and ready to receive intimations from them, and ready to act upon those only which they receive by this oral communication.

"Therefore if there were not a thing exhibited—if there were not a good pair of steers, nor a fine horse, nor likely cow in the whole country, if there be society—if there be ladies, wives and daughters—if there be those connected with the tillage of land, I say that these annual meetings are highly important to progress in the art to which they refer. I come here as a poor farmer, to meet with other better farmers, ready to receive from them any intimations their experience may have taught, and desirous only of suggesting something for their reflection which now or hereafter may draw their attention, and draw it usefully to something in the agricultural art."

THE toiling millions who dig up riches from the ground, are the true benefactors of the world.

AGRICULTURAL OPERATIONS OF THE PATENT OFFICE.

We are glad to learn from the following, that the National Intelligencer, published at Washington, is waking up on the subject of agriculture:

"It will be recollected that a seed establishment in London about a year ago presented to the Patent Office twenty-six varieties of turnip seed, with the understanding that they should be cultivated in every State and Territory of the Union, with a view of obtaining accurate reports of the results of the experiments. Numerous reports have been already received, from which we learn that the success of each variety has been variable in different localities, and often in the same locality. In some instances complaints have been made that the seeds would not germinate, while other accounts from the same localities state that all the desired results were fully realized. It is believed that the mass of testimony thus received will be amply sufficient to indicate the applicability of each variety to the peculiar locality in which success has attended its culture. A favorable report in a single instance is always deemed sufficient to prove what ninety-nine failures might to some minds seem to disprove, the ninety-nine showing nothing more than that in such instances the right means had not been used, or that injury to the seeds had occurred by means of heat, drouth, &c., either before or after sowing, or that the soil was sterile and could not produce, or too rank and fertile, and therefore developed tops instead of roots.

The same establishment has recently presented to to the Patent Office, in sufficient quantity, 30 varieties of cabbage seeds, which have been distributed with the same object. Another house in the same line of business at Paris has presented five varieties of peas, one thousand pints each, to be appropriated in like manner; and a house at Hamburg has presented a quantity of the seeds of each of the varieties of grass now cultivated in Europe. To appreciate the value of these investigations it is only necessary for us to reflect upon the great extent of country throughout which the experiments are to be extended, and the strong probability that in each section will be developed to perfection the precise variety of cereal or other vegetable to which it is peculiarly adapted, and thus the best crop in each locality will there perpetuate its kind.

The public interest in these operations is manifested by the vastly increasing correspondence of the office with individuals in all parts of the country, not less than by the very marked favor so uniformly shown toward it by the newspaper press. This correspondence, however, will no doubt soon

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abate when it is known that this distribution of seeds, cuttings, &c., is to be made through the members of Congress and agricultural societies, at least until more ample means shall be provided for the prosecution of the beneficent purposes in view.

When it is remembered that according to the census tables of 1850 the number of the "*free male population*" of the United States over fifteen years of age then engaged in agricultural employments was 2,400,583, while those engaged in *all other pursuits* were but 2,871,133, and that almost the entire slave population is similarly employed, it will not appear an unreasonable suggestion that this important branch of industry should be ardently cherished by the Government. But this is not the strongest light in which the argument may be presented. Agriculture is the basis of all prosperity and the sole creator of wealth. In every other pursuit men toil for the means of purchasing the products of agriculture, and their happiness and welfare are dependent npon the prolific yield of the generous soil. In fostering agriculture we are therefore ministering to the welfare of all. This is measurably true of every useful occupation, but it is eminently so with respect to agriculture and to the pastoral and other occupations that are intimately connected with it.

Little has hitherto been done in a direct manner by our government in this behalf: but, if the people shall only will it, much may henceforth be done. Increased and improved products may soon be developed in every State of the Union by the introduction of new varieties of animals and plants, while every discovery adapted to promote these objects may be made available to all to whom it may prove advantageous.

Indian Corn.—Mr. W. F. M. Army, an intelligent agriculturist at Bloomington, McLean county, Illinois, has communicated to the Patent Office the results of some very ample tests made by him of certain varieties of corn. It appears from this communication and from the accompanying specimens, that the "Wyandot Prolific Corn," of which we have recently made mention, does not, in that locality at least, realize the hopes heretofore entertained of it, but indicates a tendency to degenerate into the common gourd-seed corn. The writer expresses the opinion, however, that it will do very well in a more southern latitude. The soil upon which these tests were made is very fertile, requiring no artificial nutriment or stimulus.

The same writer, several years ago, procured in Tennessee seeds of the "Tennessee Flour Corn," which he cultivated with great success in Western Virginia for a time, and then took with him to his present home, and has propagated it extensively in that region with equal success. He thinks that it is as applicable also to Ohio, Indiana, Michigan, and the southern part of Wisconsin. He plants in the first week in May and harvests in the first week of November, making the hills four feet apart, and having three stalks in each hill. His estimated yield of dried shelled corn is one hundred bushels to the acre, sixty pounds to the bushel. This corn, it is added, is not only prolific, but will also bring a few cents per bushel more than the yellow, because of the purity and whiteness of the bread made from its meal, and also because it is one of the varieties from which starch is made with great facility.

A CURIOUS LAKE.

The Placerville (Cal.) American gives an account of a peculiar lake on the east side of Bear River Valley. It is an immense pool or spring, rather than a lake, a little over one hundred yards in length along the base of the mountain, and nearly the same in width, but extending in one place under a shelving rock that nearly touches the surface of the water for many yards. That it is an immense spring issuing from the mountain, is apparent from the fact that any floating substance thrown under the shelving rock, is immediately brought outward to the opposite bank. There is no visible outlet to the waters except that the margin is little else than rock with innumerable fissures traversing it in every direction, and through which, though with no apparent current at the surface, the water undoubtedly escapes.

The surface of the rocks at the edge of the water, and for several inches above and below, is coated thick with a substance closely resembling sulphur, but without its properties, being uninflammable. Not a living fish is to be seen in its waters, but digging into and breaking up a kind of soft scoria or volcanic mud nearly hardened into stone, that makes a portion of the bank, great numbers of fish, from two to six inches in length are found embedded therein, and perfectly petrified.

LARD AND STRYCHNINE.

A short time since a paragraph was published in a number of our papers, in which it was stated that lard was an antidote for that terrible poison, strychnine. B. Keith, M. D., of this city, in a communication to the Eclectical Medical Journal, states that he has been experimenting, in order to verify or disprove the correctness of the lard antidote. He operated upon a strong and healthy dog, to which he administered 8 ounces of lard, and five minutes after one grain of strychnine. In six hours after taking this small quantity of strychnine the poor dog breathed his last. This experiment proves conclusively that lard is not an antidote to this frightful poison. [Scientific American.

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GUTTA PERCHA.

This substance, which, within a few years, has become so well known, is produced from a tree called the Isonandra Gutta, belonging to the natural order Sapotaceæ. This tree grows to a great height, but its wood is useless for industrial purposes, and is prized only for the peculiar substance which it exudes. These trees abound on the islands of the Indian Archipelago, but gutta percha was unknown in Europe till 1843, when Dr. W. Montnomerie called attention to it in a letter to the Bengal Medical Board. In April of the same year, specimens of the gum were brought to Europe by Dr. D. Almeida, and presented to the Royal Academy of Arts at London. It did not attract particular attention at first, and the receipt was merely acknowledged by that body. A gold medal was soon after awarded, however, to Dr. Montgomerie for the same service.

The method which the natives employ in gathering that substance, is by cutting down trees of full growth, and making rings about the trunk, by removing the bark, at intervals of about twelve to eighteen inches, and then placing beneath these rings, some vessels to to catch the liquid. It is then collected and boiled, in order to remove the watery particles, and reduce to a thicker consistency.

When the article is in its first state, the color is of a grayish white. It is usually of a reddish hue, however, which is owing to the chips of the bark which are mixed with the liquid during the process of incision. Besides this, the substance is adulterated by foreign matter, but by the process of boiling till the gutta percha is quite soft, and then spreading it, the impurities may be removed by picking them out. When new, it is greasy to the touch and possesses a peculiar leathery smell. It dissolves in boiling spirits of turpentine, and in naphtha and coal-tar.

When purified for manufacture, gutta percha possesses a reddish brown color. Its most remarkable property, however, is that of softening to a plastic state, in hot water; but when cold recovering its toughness and rigidity. Its specific gravity is 9791—being somewhat lighter than water. It closely resembles India rubber in its chemical composition, but possesses several distinct properties, the principal of which is its want of elasticity. Its ductility is such, at a temperature of 110° to 241°, that it may be extended into thin sheets or drawn into threads. It is a powerful negative electric, and is used for insulating positive surfaces, or developing quantities of electricity, in place of the glass cylinder. A wooden cylinder or bottle, with a thin sheet of gutta percha wound around it, gives a copious supply of electric fluid for experiment.

Although the introduction of this article into this country is of recent date, the uses for which it are applied are many and important. The natives of the countries where it is produced have used it almost exclusively in the formation of handles to axes, which possess, when cold, great toughness, and a certain degree of flexibility. The quantity imported into Europe and America is increasing every year, and the great demand for it threatens, soon, to destroy the supply. The natives, in gathering it, cut down the tree, thereby destroying at once all hopes of future supply from the same source. Greater economy should be used in its production. The method practiced by the Burmese in obtaining India rubber, by making oblique incision in the bark, would remedy the defect.

One of the most important of its uses is that of enclosing telegraphic wire when placed under water, so as to protect it from destroying agents. Its great strength and durability render it almost indestructible, and make it an article of the most vital importance when connected with the sub-marine wires.

A series of interesting experiments was made at the Birmingham (England) Waterworks, to test the strength of gutta percha, and with a view to its applicability for the conveyance of water. The experiments were made upon tubes three-fourths of an inch in diameter, the thickness of the gutta percha being one-eighth of an inch. These were attached to the iron-main, and subjected to a pressure of 200 feet head of water for two months without being in the least damaged. The pressure of 337 pounds to the square inch was then applied, but to the astonishment of all, the tubes were still unhurt. It was then proposed to use 500 pounds pressure, but it was found that the lever of the valve would not bear this weight. The highest power of the hydraulic pumps could not burst the tubes.

It is found to be a useful auxiliary in the art of surgery. By its plasticity and power of retaining any shape given to it when cool, it has become most important in cases of fractured bones, taking the place of wooden splints and bandages, and imparting an ease and comfort which was unknown with the old appendages. It is useful in printing silks and cottons, as it amalgamates readily with colors.

During the few years that this substance has been in use, it has acquired a fame almost unprecedented in articles of modern invention and manufacture. To what uses and purposes it may hereafter be applied remains to be seen, for it is now in its infancy. Perhaps, by experiment, it may be found to possess qualities which will adapt it to other and various uses, and become an almost indispensable article for numberless uses.

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The purposes to which it has already been applied, have been greatly multiplied since the discovery of the new processes of vulcanization by the Messrs. Rider and Murphy, of New York, whereby the elasticity of India rubber, the harshness of ivory, or an intermediate quality may be produced. A series of experiments, conducted by the government, showed that their vulcanized goods possess such qualities of superiority as to recommend them for a greater number of uses in the Navy.

CULTURE OF ROOTS.

Mr. Brown—Agreeably with my promise, I will endeavor to give a concise account of my method of raising root crops, and the uses to which I have applied them. And perhaps it may be as well to give you my manner of sowing and cultivating the turnip crop, which I adopted last season, although I have for many years raised a considerable amount of that crop, for a farmer with a moderate quantity of arable land, which will be the case, usually, in the hilly regions of New Hampshire. In the spring of 1855, I manured well one acre and five eights of ground, and planted the same with cord; at my first hoeing, I sowed my turnip seed broad-cast, after having plowed lightly between my corn rows. The time of sowing was sometime during the first week of July. In the fall I harvested from that field one hundred and nine bushels of the soundest corn I have seen for many years; and quite late, just before the ground froze, I gathered in my turnip crop from the one and five-eights acres, which measured, as I stored them away in my cellar, two hundred and twenty-six bushels. I had also two cart-loads of extra pumpkins on the same land. I had another small spot of ground measuring seventy-one square rods, which I sowed to wheat; that I harvested sometime in the fore part of August, which when threshed, measured ten bushels of good wheat. Immediately after the wheat was cut I turned under the stubble, and after smoothing the ground, I mixed turnip seed with my grass seed, and sowed broad-cast. I sowed this small field on the fifteenth of August. I gave this piece of land a sprinkling of ashes at the time of sowing my last seed, and harvested from it seventy-four bushels of turnips, of the best quality that I ever saw, and they have been so considered by others who have had them for table use. My kind of turnip is the flat English. The principal use which I have made of my turnip crop, has been feed for my cattle; I think much of the crop for that purpose. I consider it a great saving of fodder, and have had some very fine stock which I have exhibited at various fairs, and nearly all the extra keeping of the same has been turnips, which I cut with a root cutter. The grass seed sown with the turnips came up very even, and was, when small, just shaded enough to preserve the roots in a vigorous state, and when I last saw the grass before the snow fell, I thought it looked the best, and bid the fairest for a good crop the next season, of any that I have ever had. I think land seeded in this way, far better than to stock down in the spring with oats, which I find a very exhausting crop.

In the season of 1854, I found, toward the last of June, that I had a small portion of mowing land, which was so bound out, that there was no promise of a crop of hay; not even to be worth mowing. I plowed up ninety-two square rods of this land, and spread on it twelve loads of compost manure, about the 12th day of July. On the 25th day of July, "*wet or dry*," I sowed my turnip seed; and harvested from that field three hundred bushels of turnips. I mixed my grass seed with the turnip seed as above stated. Last haying season, I cut the finest crop of herds grass on the same land, that I have ever had from any method of stocking down. The quantity of turnip seed sown by me is at the rate of one pound to an acre. I have now gone into a greater length than I intended; but it is at your election to use as much of the above as you may think proper, and in such a manner as you may please.

Josiah Bennett.

Westmoreland, N. H., 1856.

Remarks.—Mr. Bennett presented some very large and fine cattle at the national exhibition last fall, and imputed their superiority mainly to their being fed on roots. We are glad he has given his testimony in favor of roots as profitable feed for neat stock.

[New England Farmer.

JUICE OF THE WATER-MELON.

A correspondent of the Prairie Farmer presents the following method of using water-melons:

"I endeavor, every year, to raise a good water-melon patch. They are a healthy and delightful fruit, I think. I cultivate the icing variety; plant early in May, and again towards the end of the month, so that they may come in succession. When they commence ripening, we commence cutting, and use them freely during the hot weather. When the weather becomes cool in September, we haul a quantity of them to the house, split them open, with a spoon scrape out the pulps in a cullender, and strain the water into vessels. We boil it in an iron vessel, then put in apples or peaches, like making apple-butter, and boil slowly until the fruit is well cooked, then spice to taste, and you have something that most people will prefer to

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apple-butter or any kind of preserves. Or the syrup may be boiled without fruit, down to molasses, which will be found to be as fine as any sugar-house molasses. We have made in a fall as much as ten gallons of the apple-butter, if I may so call it; and molasses which has kept in fine condition until May."

GROUND MOLES.

The editor of the Sumpter Watchman says: "A friend is troubled with a large number of ground moles, which infest his fields, producing more destruction to his corn, both before and after making its appearance above the ground," and calls for a remedy or preventive for their ravages.

The mole is a much slandered and abused little animal, for, instead of being the thief and marauder it is represented, it is really incapable of performing such mischief. Nature has not endowed it with the capacity. It has no grinders, and cannot masticate corn. Its food is the worm and grub, and we venture to say, if the friend of the Watchman destroys the mole, his cornfield will suffer more than ever before. The mole burrows through the ground, and the field mice and rats follow in his tracks, and consume whatever suits their voracious appetites. Let the gentleman who complains of moles get some ratsbane, and exterminate these vermin, and assist the moles to destroy tee grubs, and he will no longer complain of their eating his corn.

Should any one be sceptical upon this subject, let him catch a mole and examine his teeth, and then he will be satisfied that he must look elsewhere for his enemy.

PLOWING DEEP.

The depth of plowing is a question which must depend on many circumstances. I plow all my own land from eight to twelve inches deep. Much of it is sandy, and I manure it heavily. The deeper such land is plowed, the better it will stand the drought, because the roots will strike nhe deeper, and on light soils, however much the manure may be diffused, the roots of the plant are sure to pursue and find it. On my heavy clay soil, in turning over the sod after haying —say once in half a dozen years—to exterminate the bad grasses and briars, which spring up after a few years, I am suspicious that I have usually plowed deeper than is profitable, In my next experiment, for which I am preparing a large compost heap of night soil and swamp mud, I propose to run the plow to the depth of about eight inches, apply the compost, harrow it well, and sow my seed in August, or early in September. On such land, which has a strong affinity for ammonia, there will be little loss by evaporation, and the young grass roots will find their food at hand for astart. In ofter life, much of their nourishment is derived from the air and water; and the heavier portions of the manure they will have time to seize upon, before it washes below their reach. For several years, I have used the sod and subsoil plow, and run it a foot deep, for my hoed crops; but upon a stiff clay, which had been plowed but five or six inches before, I should deem such an operation dangerous. A deep soil is desirable everywhere, but it must be deepened gradually, unless bountifully manured. In our rocky soil, it is often impossible to plow more than eight inches, though I believe it is well established that a granite subsoil, taken even from the bottom of a well, will become fertile merely by exposure to the air, so that on such soils, we have little danger to apprehend from deep cultivation.

[HENRY F. FRENCH, in N. E. Farmer.

OHIO AGRICULTURAL COLLEGE.

An institution has been incorporated under the above name, and put into successful operation at Cleveland, Ohio. Its design is to place within the reach of farmers, both old and young, the means of acquiring a thorough and practical acquaintance with all those branches of science which have direct relations to agriculture.

The plan of instruction consists in daily lectures, which embrace all the departments of agricultural science; chemistry in its applications to soils, manures, &c.; anatomy and physiology, with reference to the feeding and breeding of stock; geology, mineralogy and botany; natural philosophy, rural architecture, draining and farm-book-keeping, and the political economy and history of agriculture, are included in the plan. HARVEY RICE, President, and THOMAS BROWN, editor of the Ohio Farmer, Secretary.

A DOG'S JEW'S HARP.—A brace of Paddies having landed in Boston, from the Emerald Isle, went to a tavern and called for dinner. The landlord informed them that he had no victuals prepared but apple dumplings, which were accordingly set before them. One says to the other, "What kind of meat is this? I never saw the like in Ireland." "Arrah, by my showl," said the other, "but I'll soon be afther finding out if it be poison or not," and threw one of the dumplings under the table to a large dog, who instantly seized it. The heat of it severely burning the dog's mouth, the animal began to whine and howl, and paw his mouth with his fore foot, making a great noise. "Ah, and surely it's a dog's Jew's harp; only hear how swately he plays!"

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THE BEST PRODUCE.

We often talk of the staple productions of different countries, and of what is best or most successful in certain regions. Some regions produce timber, some stock, some cattle, some minerals, some corn, some hay, some wheat. Then again, some are adapted to mechanical uses and produce the fabrics of the loom, anvil and mill. Each country produces something peculiar to itself, and for which it is noted, as one corn, one mahogany, one hemp, one rice, one gold and one flour, wool or cloth.

But of all the productions of any or all countries, one stands pre-eminent; one rises above all in importance, in value, in dignity. It is Men. The country that produces the best men is the best country. The land that grows the noblest human crop is the richest and most honored. It is well to grow a fine crop of wheat, corn, cotton or hemp—a fine stock of hogs, horses or cattle; but infinitely better to produce a rich harvest of noble, brave and good men and women. The farmers who produce good crops do well; but those who produce good families do far better. What honor to the country is equal to the production of great and good men? What has America ever done equal to the production of her noble sons and daughters? What are her mills, telegraphs, roads, cities, wide harvest fields and rich plantations, compared to her great and worthy men and women? Farmers, raise whatever you may, your last, noblest, grandest production is in your homes. Your children, in whose souls you are to plant the seeds of immortal virtue and ever-growing thought, whom you are to cultivate better than your corn or cattle, are, or should be your first care. They are to honor or curse you. You are to live in them. If you give them noble minds and virtues, a generous and intelligent care and culture, if you rear them in the light of the best truth, the warmth of the best principle and the dews of the best religion, you may expect a produce infinitely rich and glorious. The farm that produces the best children, that produces the most mind and moral worth, is the best farm, and most efficiently managed.

A good harvest of mind, of men, is the result of culture as much as a good stock of cattle, or crops of grain. While we vie with each other in the productions of our farms, let us not be so unwise as to forget to study and apply the principles of human culture.

[Valley Farmer.

A CONSIDERABLE quantity of cork oak acorns were imported this season by the Patent Office and distributed in the Middle and Southern States. These acorns are from the south of France.

For the Farmer.

ARENA PRAIRIE IN SUMMER.

BY DR. W. H. BRISBANE.

Ornate with dress of richest hue,
Yellow and green, pink, red, and blue,
Arena spreads her prairie wide,
In all her beauty and her pride.

Her crystal waters gently flow,
And gentle zephyrs sweetly blow;
Her flowerets gorgeous bud and bloom,
To scent the air with rich perfume.

Her green clad hills around her rise,
Bathing their summits in the skies;
Her rocky cliffs like castles seem,
When evening stars upon them gleam.

Her days shed forth a glorious noon;
Her nights reflect a placid moon
Her dew-drops too as brilliant are
As diamond gem or twinkling star.

No fairer spot on earth's domain
Than is Arena's flowery plain;
Can mortals 'neath cerulean dome
Have brighter, sweeter, lovelier home?

WATER-PROOF GARMENTS.

M. Payen, the celebrated chemist, in one of his lectures on "Chemistry, as applied to Manufactures," which he is now delivering at the Conservatory of Arts and Trades, gives the following very simple method of rendering any species of tissue water-proof without the assistance of caoutchouc or gutta percha. Dissolve two pounds and a half of alum in four gallows of water; dissolve also in a separate vessel, the same weight of acetate of lead in the same quantity of water. When both are thoroughly dissolved mix the solutions together, and when the sulphate of lead resulting from this mixture has been precipitated to the bottom of the vessel under the form of a powder, pour off the solution, and plunge into it the tissue to be rendered water-proof. Wash and rub it well during a few minutes, and hang it in the air to dry. Twenty thousand tunics, added M. Payen, are now being prepared in this manner for the French army by order of that government.

AN EGG PUT INTO A PHIAL.—To accomplish this seeming incredible act, requires the following preparation:—You must take an egg and soak it in strong vinegar; and in the process of time its shell will become quite soft, so that it may be extended lengthways without breaking; then insert it into the neck of a small bottle, and by pouring cold water upon it, it will re-assume its former figure and hardness. This is really a complete curiosity, and baffles those who are not in the secret to find out how it is accomplished.

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TALK ABOUT THE TIMES.

Now is a good time to preach a short lay sermon to our rural readers, and since we are always disposed to accept of circumstances as they are providentially develloped, we will take a look up and down the world, and try to see what is best for us to do.

The past few years have been, with little exception, years of unexampled prosperity to the farmer, and whatever calamity did come, was less felt by him than many other classes of society. His produce has commanded a high price and ready cash, and if he has refused good offers, and now that prices are lower has a stock on hand for sale, it is his own fault. The same is true of farm stock. Think back a little. Cattle and horses have been going up, up, until some of you who had a good colt to sell, did not know how much to ask; and at this moment, good draft horses and roadsters are higher than they ever were before in this conntry. In fact they are so high here that they will not pay cost and transportation to the Eastern market.

What is the consequouces of this state of prosperity? Our enterprising farmers have been buying all the land that joins them; have torn down the old houses and put up a stylish mansion; have fitted it up with *boughton* carpets, mahogany furniture, and every thing else to match. The good wife carries as fine a shawl and swings as good a skirt as "other folks." The plain farmer himself puts his big horny hand through a coat sleeve as glossy as French broadcloth can be, and his weather-beaten face surmounts a vest of finest satin. The daughters are posted in all the styles of the city, and the sons take to cigars and spry horses and travel, as natnrally as a duck takes to water. The old buggy stands out under the apple tree, while a three hundred dollar carriage with tipped harness and a pair of sleek bays, occupy the horse barn.

Now all these things take money, and who deserves them or can afford them better than the thrifty farmer? We don't blame him, on the contrary we say, let him go it. But it was brought about by the good times we have had, and now we are likely to have a more sober time. The great fever of California is over, the wars of Europe are over, a large harvest last year has filled the granaries of the world, and things are about as evenly balanced as they ever get to be. We do not look for flour to be above $6 a barrel again for a while, corn and pork always balance eachother, cattle and horses will settle back to a rational standard. Farmer's boys and girls must be pleasuring a little less, and put on cowhide boots and calico oftener then they do white vests and barege dresses; in short, we must sober down and go to work, for it is one of my doctrines, that this is the only honest way to get a living.

Did you ever get in a boat on a pretty little lake, and put off from the shore and sit down to fish, while the gentle wind breathed against your boat, and breathed it off gently till at the end of an hour you was a long way from where you started? So it is with your life! You have floated a good ways from the old starting point of steady, industrious habits, while in this prosperous chase of pleasure and adventure. As we said, there is now likely to be a steady time for some years, unless some unforeseen break-up should burst upon us, and we had best trim our sails for such a time. If we were to write a business almanac now, we should first put among the prognostics—Look out for a long spell of weather! We don't think it is going to be a bad time by any means, we think it is going to be a right good time all around, equalizing the position of buyer and seller. But now my good farmer friend, don't be alarmed and think of economizing by dropping the Ohio Cultivator; that would be bad economy; besides, we think you have found out by this time that you cannot get along without it. [Ohio Cultivator.

SOURS AND ACIDS.

The sourness of the juice of a lemon and the acidity of vinegar are so well known that the mere mention of them is sufficient to convey a knowledge of the chief qualities of sours, or acids in their natural state. There are so many acids that two or three pages of an index to a chemical book are taken up in enumerating them. Every fruit contains an acid; nearly all the metals are capable of forming acids. When coal, wood, paper, rags, charcoal, brimstone, phosphorous, and many other substances are burned, acids are produced. A flint stone is an acid. There is an acid in our window glass, and in many of the most costly precious stones. The air we breathe contains an acid. We create an acid in the lungs by the act of breathing. By a very slight change sugar can be converted into an oxalic acid, which is a strong poison. Sugar, by another change, is converted into vinegar. These two illustrations show that a sweet can be converted into a sour; but when sour fruit becomes sweet it proves almost to demonstration that a sour can become a sweet acid.

The most powerful acid is that derived from burning sulphur—it is called sulphuric acid, and is one of the most important articles of manufacture. Its acidity is so great that a tea-spoonful is sufficient to make a pailful of water quite sour. Nitric acid, obtained from niter, or saltpeter, is of the next importance in the arts; it is so corrosive that it has long been distinguished by the

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name of *aqua fortis*, that is, strong water—strong, sure enough, for a nodule of iron, lead, or silver, dissolves in it like sugar placed in water. From the number of acids which we find in nature, and the tendency of many artificial substances to become sour, it is evident that acids and sours are essential to our life and well being. Acids assume all forms and colors; some are liquids, some gaseous, others solid. The acids of fruits, when separated from the grosser particles that accompany them, are very beautiful and crystalizable substances. By the ingenuity of the chemist the sour of unripe apples, grapes, tamarinds, lemons, &c., may be crystalized into beautiful snow-white bodies, which, however, when touched by the tongue, at once indicate their origin by their flavor.

[SEPTIMUS PIESSE, in Scientfic American.

ANIMALCULÆ----THE WONDERS OF THE MICROSCOPE.

The recent astonishing discoveries of Ehrenburg, a Prussian naturalist, have given a new aspect to this department of animated nature, even in a geological point of view. He has described seven hundred and twenty-two living species which swarm almost everywhere, even in the fluids of living and healthy animals in countless numbers. Formerly they were thought to be the most simple of all animals in their organization—to be in fact a little more than mere particles of matter endowed with vitality; but he has discovered in them mouths, teeth, stomachs, muscles, nerves, glands, eyes, and organs of reproduction. Some of the smallest animalculæ are not more than the twenty-four thousandth of an inch in diameter, and the thickness of the skin of their stomachs not more than the fifty millionth part of an inch. In their modes of reproduction they are vivaporous, oviparous, and gemmiparous. An individual of the Hydatina senta increased in ten days to one million; on the eleventh day to four millions, and on the twelfth to sixteen millions. In another case Ehrenburg says that one individual is capable of becoming in four days one hundred and seventy billions! Leuwenhoeck calculated that one billion animalculæ, such as occur in common water, would not altogether make a mass so large as a grain of sand. Ehrenburg estimates that five hundred millions of them do actually exist in a single drop of water. In the Alps there is sometimes found a snow of red color; and it has been recently ascertained by M. Shuttleworth that the coloring matter is composed chiefly of infusoria, with some plants of the tribe of Algæ. And what is most singular is, that when the snow had been melted for a short time, so as to become a little warmer than freezing point, the animals die, *because they cannot endure so much heat!* A specimen of *meteoric paper* which fell from the sky in Courland in 1686, has been examined by Ehrenburg, and found to consist, like the red snow, of *Conferva* and *Iufusoria*. Of the latter he found twenty-nine species. Surprising as these facts are, it will perhaps seem still more incredible that the skeletons of these animals should be found in a fossil state, and actually constitute nearly the whole mass of soils and rocks, several feet in thickness, and extending over areas of many acres. Yet this too, has been ascertained by the same astute Prussian naturalist. [Portland Transcript.

A good compound microscope, costing from $10 to $15 in New York or Boston, is one of the most interesting and instructive articles imaginable for an inquiring or curious mind. It opens a new and astonishing world to the eye, and teaches a new lesson in the infinities of God's created works—a lesson never to be forgotten. The discovery of uncounted multitudes of animate and active life in every draught of water we drink, is calculated to give the old-fashioned notion that man is about the only creature in the world quite a jog to say the least.

BUSINESS AND AFFLICTION.

Curious combinations are oftentimes found in the advertising columns of our newspapers. The following, which we may, under the circumstances, venture to style the *utile cum dulce*, is the announcement made by a lately bereaved wife:

"Died on the 11th instant, at his shop, No. 20 Greenwich street, Mr. Edward Jones, much respected by all who knew and dealt with him. As a man he was amiable; as a hatter, upright and moderate. His virtues were beyond all price, and his beaver hats were only three dollars each. He has left a widow to deplore his loss, and a large stock to be sold cheap, for the benefit of his family. He was snatched to the other world in the prime of life, just as he had concluded an extensive purchase of felt, which he got so cheap that his widow can supply hats at more reasonable rates than any house in the city. His disconoslate family will carry on business with punctuality."

MACHINERY IN THE HUMAN FRAME.—Very few, even among mechanics, are aware how much machinery there is in their own bodies. Not only are there hinges and joints in the bones, but there are valves in the veins, a forcing pump in the heart, and other curiosities. One of the muscles of the eye forms a real pulley. The bones which support the body are made precisely in that form which has been calculated by mathematicians to be the strongest for pillars and supporting columns—that of hollow cylinders.

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A TRIP THROUGH THE NORTHWESTERN Counties of WISCONSIN—With its Incidents and Novelties.

A comfortable but various ride, by rail and river, of about 36 hours duration, via Dunleith, took us safely through from Madison to La Crosse—one of the enterprising towns of the hither Northwest, and the first above Prairie du Chien, of any considerable size, on the Wisconsin side.

La Crosse, like all other towns of rapid growth, presents a great deal of rough incompleteness of appearance. Many of the first growth of buildings are small and shabby, but in their midst, some good ones of the second growth are already rising up, among which is a spacious hotel, just about to be opened; and we will venture the prediction that it will be a good time for the town, or at any rate for the traveling community, when that thing happens. For what is a town—even La Crosse—without a good, tidy, well kept hotel, except a place to be shunned by all who can? The village site is elevated, beautiful, and ample in extent for a city, which it is undoubtedly destined soon to be—judging from the apparent enterprise of the people, and the extent of ground staked out into lots, being probably sufficient for a population of at least 50,000. The soil of the town site is rather sandy and disagreeable for streets, but with proper graveling can be made very good.

La Crosse is in the hands of good business men, who will make the most of all her advantages. It already nearly or quite equals Madison in the number of its whiskey shops. The country back of La Crosse is much of it fine, and it is being rapidly settled. But some part of the way to Black River Falls, and especially near the latter place, the soil becomes rather sandy, as the pinery region is approached.

Black River Falls, about 50 miles N. N. E. of La Crosse, is quite a lumbering point, with an ample and fine water power for building up a manufacturing city, when its time comes. It is understood to have an inexhaustible bed of iron ore, of rich quality, and works are about to be erected for its manufacture. If this project is successfully carried forward, it will, in connection with the lumbering business, soon make a lively town.

The route from thence to Eau Clare, thro' the Trempelean Valley, passes through some fine country, and no small amount that is exceedingly broken, and generally quite destitute of timber. The almost interminable succession of mound-like mountains, and sink holes, occurring for miles over the dividing ridge presents the most singular and novel scenery imaginable. No one can appreciate it without seeing it. It beggars all mere description, and in our opinion will much of it remain for some time unsettled.

Eau Clare, or Clear Water, is a thriving town, just coming up, at the junction of the Eau Clare and Chippewa rivers. It has two tolerable lumbering mills, which are doing considerable business; also a place called a tavern, but kept in a style that would outrage decently bred hogs. We would lay a wager that it had not been swept out in a month, and doubtful if it had been washed in a year. Then, such a table!—Oh, Moses! The variety consisted of *brown* bread, poor pork, and *'lasses*, accompanied with an article called *coffee*, but it might have been called anything else with more propriety. However, we will not dwell on so disagreeable a subject; suffice it to say, that there is a new house just ready to open, which will undoubtedly put an entirely new face on things, and cannot possibly put on a worse one. We see no reason why a smart town will not at once spring up at this point, especially as the Chippewa is navigable for steamboats of light draught, most of the season.

Chippewa Falls, twelve miles above the mouth of the Eau Clare, through a fine farming country, affords a large amount of water power, having a fall of about 20 feet, of the entire river, within a distance of one-fourth of a mile—sufficient at all times to propel a hundred run of mill stones, or as many saws.

Messrs. Allen & Co. already have an extensive lumber mill at this point, employing in all perhaps 100 men, who, with their families and appendages, make quite a little village, though probably but the embryo of what will one day be about so fine a water power—especially as the country adjacent is much of it a fine farming country, which with the vast amount of pine up the Chippewa and its tributaries, must altogether make up an amount of business to soon build up a bustling town at Chippewa.

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Small steamers run up to this point in high stages of water, and doubtless some of the great railroads about being projected will deem it their interest to hit so promising a settlement. Chippewa is now what Rochester (N. Y.) was 40 years ago—an unsubdued wild giant in the wilderness that will erelong be trained to greater usefulness, and hold an inland city in its palm. It strikes us as a grand point for the enterprising settler, as the lands are good, and considerable of them yet at Government price. The surplus that a new beginner can raise, will readily sell at a high price, to the lumbering community. Then when winter comes, one can employ his teams in the woods, lumbering, at even greater profit than in the summer, which is no small consideration to a new farmer; the keeping of his team, often almost idle during the winter, is no small tax.

Some may fear that this is too far north for profitable agriculture; but we don't think so. The soil is usually slightly sandy, and consequently warm and early; and, as far as we can learn, the crops ripen and yield much the same as in the southern part of the State. We would recommend to the enterprising young man, of moderate, or even ample means, who would embark in farming, or almost any other business incident to a new country, to look this way before he goes into the naked, timberless, and waterless prairies further west.

Northwestern Wisconsin is as a whole, the most beautifully watered of any country we have ever seen, and the water is usually as pure as trickles down the mountains of Vermont. It must prove a very healthy country, beyond doubt.

The general character of the country traversed thus far is variable and changing, even more so than through the southern portion of the State. La Crosse, Jackson, Trempeleau, and Chippewa counties, are usually very rolling, and some portions of them broken and even mountainous—all of which is the more manifest from the general lack of timber. Still this lack of timber, which is almost universal, is obviously the result of fire; for the great abundance of *grubs*, or small oak shrubs, shows that the roots are there, and the trees soon would be, if they had half a chance. The soil is generally fair, to middling, and some of it fine. The poorest pine lands are not so poor but that they would grow good clover, and make good sheep farms.

Fine clear streams of partially soft water traverse almost every valley, and are said to abound with speckled trout. But this last we think is a fish story, for the reason that we did not have the pleasure of seeing any of them, either in the streams or on the table. Some portions of the country are settling with considerable rapidity, whilst others, and large ones, too, are a blank; and from the vast extent of speculators' purchases, will be likely to be, we think, for some time to come. The roads through this country are as yet few in number, but usually quite passable for so new a region.

The public house accommodations are as yet of course of the most primitive order, where bare comfort is all that is expected, and more than is usually found.

In going from Beef River Station, (as it is miscalled, we think, as all their beef was pork, and salt at that,) to Eau Clare, we passed the somewhat famous town of Bridge Creek, on the right; famous in the recent Gubernatorial election, and more recently so, by the brilliant and glowing letter published by us in the May number, and headed, "The Valley of Canaan." We regretted to learn that the writer of so promising a letter was not realizing all of his fond expectations in the progress of his favorite Valley of Canaan. Notwithstanding all his confident hopes, and predictions, that a city would at once rise up around him, with its business, churches and bells, we learned, to our surprise, that he still remains the only settler in the town, and bids fair to be for the present. Alas, for human hopes and calculations! especially in a new country.

We saw the tracks and traces of divers large *varmints*—such as the elk, bear, wolf and beaver. We were especially interested in the half-human works of the latter. Their way of gnawing down trees—some of them at least ten inches in diameter—and, cutting them up into lengths, dragging them into the creeks, and making good substantial dams of them, beats everything in the way of brute instinct we have ever seen. In gnawing they take out chips as large as a big turning gouge. Some specimens of them may be seen at our office. They actually

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show more sagacity than many men we have seen engaged in damming streams. Then, their houses are quite commodious in their way—as much so as some *Hoosier* huts we have seen.

(CONCLUDED IN OUR NEXT.)

JEFFERSON CO. AGRICULTURAL SOCIETY.

A meeting of the members of the Executive committee of the Jefferson County Agricultural Society was held at the "Green Mountain House," in Fort Atkinson, on the 3d of June, 1856. There were present, Justus Carpenter, President; N. P. Parsons, Vice President; M. Snell, Secretary; H. H. Wilds, Kelly Atwood, Wm. Sanborn, Giles Kinney, Gerard Crane, of the Executive Committee.

On motion, the Secretary of the Society was requested to make application to the Secretary of State for one hundred dollars, the same appropriated by the State for the benefit of each county agricultural society organized according to the provisions of a law recently passed.

On motion, Milton Snell, E. D. Masters and Wm. Sanborn were appointed a committee to prepare a Premium List for the next annual fair.

On motion, All premiums of the sum of one dollar each will be paid by copies of the "Wisconsin Farmer" for one year. Papers to be furnished from the 1st of Jan. next.

On motion, Justus Carpenter will act as General Superintendent of the Fair Grounds on the days of the Fair, and will also appoint the superintendents of the different departments.

The Premium List, names of Judges, time of holding the Fair, &c., will be published shortly after the next meeting of the Executive Committee, which will be on the last Tuesday in August, at 10 o'clock A. M, at the "Green Mountain House," Fort Atkinson.

JUSTUS CARPENTER, President.

M. SNELL, Secretary.

The foregoing proceedings show the right spirit in old Jefferson. The official organization of their society ensures for it a high success, and we shall confidently expect, at no distant time, to see it one of the most flourishing societies in the State, and the country vastly bentfitted by its operations. We hope all the county fairs will not occur at the same time, as we wish to attend as many of them as we can. EDS. FARMER.

THE APIARY.

The time having arrived when the apiary requires some attention daily, I will name a few things which I consider of much importance at this season of the year, in order to secure success in the business, and preserve the bees in a healthy, prosperous state.

In the first place, every hive of bees should be examined, as early in the spring as the bees commence their labors, and the floors of the hives thoroughly cleaned of all filth and particles of combs that have collected on them during the winter. And if any portions of the combs have fallen down so as to rest on the bottom of the hives, they should be removed, or the lower part of them cut off with a sharp knife, for while in this position they afford a most convenient harbor for moths, where the bees cannot reach them to expel them from the hive. All the old crooked, ill-formed combs should also be removed, to give place to new ones. This can be accomplished by any one, without danger from the bees, in the following manner, viz: Take a handful of cotton or linen rags and set them on fire, and blow a small quantity of the smoke into the hive, at the bottom, and at the same time rap on the sides of the hive gently with a light hammer or stick; this will soon drive the bees to the top of the hive, and render them docile, when the combs may be cut out gently without being annoyed by the bees. Care should be taken not to mar or break the combs containing honey, as this is very liable to cause other bees to attack and rob the hive.

A small quantity of fine salt sprinkled around the bottoms of the hives at this season, is considered beneficial to bees. There should be as few loose boards, crevices, &c., around the hives as possible, as these afford shelter for millies. If the common hives are raised on blocks at each corner, about three-fourths of an inch, a great many moths may be destroyed by taking two or three pieces of plastering lath, (or strips of board about the same size,) and cut notches across them on one side about an inch apart, and an eighth of an inch deep; slide these under the hives, on the bottom, with the notches down. The worms will secrete themselves in these notches, to get out of the reach of the bees, when the strips may be examined and the worms destroyed. This is somewhat similar to the "Moth Traps" in my hive, which have proved the best protection from the moth yet devised, and I will warrant it superior to any other, and the arrangement can be attached to almost any form of hive in use at a trifling expense.

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As the swarming season is fast at hand, I will give a description of a hive of my own devising, which I consider a great improvement and convenience, for securing swarms that have clustered on large trees near the ends of the branches, where they cannot be reached when standing on a chair or stool. The following description which I copy from my treatise, "The Bee-Keeper's Chart," will enable any one to construct one in a very few minutes:

"Take four pieces of plastering lath about four feet in length (or thin light strips of boards of about the same size.) Tack these together at their ends, forming a square frame work; stretch a cloth over the frame and fasten it with small tacks, or a needle and thread. Pieces of cord about four feet long should then be secured to each corner of the frame, and the other ends of the cords to a pole for a handle. This makes a light, convenient platform to shake the bees into, when they are out of reach, and prevents the necessity of cutting off the branch, which is quite a consideration if the tree is a valuable one for fruit."

Last season I secured several swarms that clustered on a large pear tree in my garden, some twenty-five feet or more from the ground, and it did not require more than five minutes time, and I had no occasion to use a ladder, or climb the tree. Handles of different length should be provided ready for use, and as soon as the bees are settled and quiet, raise your hive under them as near the bees as convenient, and let an assistant, with another pole, give the limb a sudden jar to dislodge the bees, then ease them down as soon as possible, and place the hive by the side of them, being careful not to set it on them, as there is danger of destroying the queen, which would ruin the swarm.

As soon as the bees have all entered their new hive, which may be accelerated by sprinkling them gently with cold water, it should be removed at once to the place it is to occupy the remainder of the season, as it disturbs them to change the location of their hive after they have commenced working and become accustomed to it.

[E. W. Phelps, in Com. Register.

Green Gooseberry Wine.—To every pound of fruit one quart of water; let it stand three days. To every gallon of juice, when strained, add three pounds of common loaf sugar. To every twenty quarts of liquor add one bottle of brandy. Hang some isinglass in a bag in the cask. When it has stood half a year, plug it, and if the sweetness has gone off sufficiently, bottle it. The gooseberries should be quite green, though full grown.

Hope should never outgrow Energy.

For the Farmer.

HARVEST HYMN.

BY A. J. MACKAY.

In furious war, brave knights of yore
Their lives with reckless valor gave
For trophies Vengeance gloated o'er.
While eke she digg'd the foeman's grave;
But our's be toil more rich in spoil
Of nobler meeds more nobly won—
Uncurs'd by carnage, blood, turmoil,
Or tears that flow for deeds wo've done.

The seed we gave the generous earth
With liberal hand, she doth restore
An hundred fold; and labor's worth.
A thousand times, in granary pour.
And forth we to the harvest go,
Where bending grains the zephyrs wave,
To gather that she doth bestow
To recompense the worthy brave.

And, Chivalry, here is thy field—
Come show thy boasted prowess here;
He shall be chief who best can wield
The cradle, or who best can bear
Through sweltering summer heat the test
Of strength and courage, to be found
In the wide harvest of the West,
Where countless sheaves are to be bound.

And here, Philanthropy, thy zeal,
By deeds, not idle words, display—
For thou can'st act, as well as feel,
And thou should'st work, as well as pray.
While in the harvest, be our boast
A brawny arm, a tawny brow,
A heart that throbs in action most
To gather to the garner now.

ILLINOIS AND THE PRAIRIES.

"A wonderful country" is Illinois, and the States which lie around it—incomprehensible, too, to those who have never seen the broad territory they cover. Great efforts are making by the earnest men therein to develop and unfold the wealth which lies buried in their soil. Vast are the prairies, too, and all the worse that they are so. A sprinkling of "rocks, trees and running brooks" over their surfaces would make them abundantly richer in the elements of agricultural life, and save—oh, how much of man's brief time, weary labor and anxious solicitude in planting trees and pumping water! Doctor Kennicott's *Transactions* is a commendable work, highly creditable to his own industry and research, and full of promise to the future usefulness of the Illinois State Society, and as your remarks, Mr. Editor, express all that I have to say on *that* subject, I have a word or two to the managers of that useful institution. I learn that they have heretofore pursued a quite mistaken policy, in docking the pay of their *working* secretaries—the very men, in fact, to whose *brain* labor they are chiefly indebted for the good show they make in the

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getting up of those valuable *Transactions*.

Now, gentlemen managers, this won't do. If you mean to have a society useful to the people, and creditable to the agriculture of your State, you must have an office at your seat of government for the depository of its papers, documents, library and *Transactions*, with a living, thinking, writing, talking *man* inside of it—call him secretary, or what you like—as the New Yorkers do at Albany, to attend to its business, and communicate with the farmers of your State on all subjects appertaining to their agricultural advancement. And beyond this, you must pay him a salary sufficient to compensate his time and labor. *Brains* are not in the habit of working for nothing, unless there is a *soft* spot in them. In that office should be the annual, and other meetings of your society—the general agricultural head-quarter of the State. Your great, big State cattle shows are all very well, but they should be only an incident, or high holiday of the year, showing the results of your annual progress. Illinois is purely an agricultural State, wide in territory, and probably the fourth in population and agricultural wealth in the Union; and with agriculture its leading interest, why pursue a narrow, picayune policy in its development? No, that is not the way. If the funds of the society are not sufficient, compel, as you can do, your Legislature to give you the means. This saving at the spigot, and losing at the bung is no way to perfection in agriculture. Try the thing, and my word for it, you will find it paying.

[JEFFREYS, in the Horticulturist.

HOW TO MAKE AGRICULTURAL SOCIETIES PAY.

In an article noticing the success of the first exhibition of a county society in Connecticut, the editor lays down the following resolutions to be followed to make Agricultural Societies pay:

1. Circulate Agricultural papers among the people and wake them up.

2. Publish a liberal premium list, and send it to all who have anything to show, with a note of solicitation to exhibit.

3. Advertise your fair in newspapers and in handbills.

4. Get cheap fares on the public conveyances.

5. Engage an orator who is greater on farming than politics, and let him know that he is to be paid for his services in coin rather than puffs, that he may take time to prepare for the occasion.

6. Enclose your grounds and charge a quarter for entrance. Farmers are as willing as any other class to pay for their own entertainment and instruction.

STOCK REGISTER.

GLANDERS IN HORSES.

The question is often asked, "Is Glanders catching?" More than twenty years ago I began to have this question asked me, and have observed it ever since with varying opinion. I have seen a glandered horse work beside his mate three years, stalled and fed together, without taking the disease. I have seen glandered horses purchased by men who did not believe the disease contageous, and in a short time have all his work horses glandered. I have seen horses that I thought caught the infection by being hitched in a glandered stall. I have doctored glandered horses that no doubt communicated it to my hostler. I have in two instances communicated it to other horses by inoculation on the septum, after scarifying. I am now a firm believer that any horse will take the contagion by inoculation in any part of the head. I applied it to one back part of the ears, which made a rapid and large swelling, appearing to affect the membranes of the eyelids and nose. The horse died with a broken leg which he had broken one day previous to the experiment. I am also satisfied that it is extremely dangerous to horses that have any sores about their nose, mouth or lips, or even in a high fevered condition of a chronic character, and it would be most certain to be taken by all horses having the colt distemper, or catarrhal fever, if exposed. I have ever considered it an imposition upon the community to see a glandered horse from home, or hitched at a common or public hitching post.

Are the glanders curable? This depends upon circumstances; like all other diseases, it does assume an incurable stage. Either from want of knowledge of it, or faith to try, or a correct and thorough treatment, most glandered horses do die. I have made it a matter of interest for many years to dissect and examine all the phenomena of the dead patient. After examining five glandered heads and bodies, I am bold to say the glanders is nothing more nor less than cankered ulceration of the head. I have examined those where the entire membranes, fleshy parts and soft bones were entirely consumed, and the disease preying upon the hard bones—the inflammation extending to the brain, which causes the death of the animal. It is frequently the case where the glandered horse's blood is high, or by taking cold, or a fever sets in, the horse soon dies with congestion of the brain, which is seldom recognized by the groom.

I am of the opinion that glanders is a more simple disease than is generally believed. I have known some cases cured of one and

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two years standing, by administering the medicine with a syringe and probang. Medicines thus administered which are calculated to allay the inflammation and destroy the canker, will with a proper medication of the system, overcome this disease in a shorter time than many would expect.

[W. PIERCE, in Ohio Cultivator.

CHANGE OF FOOD FOR ANIMALS.

The kind of food for animals should be changed frequently. A horse long kept on shorts will be affected by a fever in his legs and feet, producing a result similar to founder. Shorts, corn meal, or cob meal, should never be given except in a mixed state with cut hay or straw. This will require them to eat slower and the food is better prepared for digestion. If given alone it ferments rapidly in the stomach, produces a general fever, injures the digestive powers, and finally produces a stiffness throughout the limbs. When these results are discovered, the remedy is a change of food. Continued feeding on oats alone, will produce the same results as shorts, or meal, and many a founder is caused by it, as by feeding and drinking when the horse is warm. If necessity compels a person to feed a horse on shorts, corn meal, or cob meal, a supply of salt should be added to prevent fermentation in the stomach.

WOOL AND WOOL DEPOTS.

Every item of news relative to the wool market is now looked for with eagerness by the farmer, and as the depression in our wheat market is making itself felt in every quarter of the State, there is, of course, the more interest felt in the hope that the wool clip may do something to relieve us from some of the embarassments of the past year. The Messrs. Goodale & Co., of the Cleveland depot, whose advertisement will be found on another page, observed, in their last circular, that prices are much firmer than usual at this season, and that they do not look for the depression which usually characterizes the months of May, June and July; and they cannot see that dealers can bring about the usual low rates, as it is well understood that the supply in market is limited. They think as we do, that the high prices of beef, pork and grain, have diverted the attention of a large portion of the farmers of the Western States, from the wool-growing interest, and consequently that the aggregate amount to forward this year will not be so large as in the two past years. This would be so, did the farming population remain stationary, but it must be remembered that the increase of population is very rapid, and that at no period was there ever a larger increase to the agriculturists of the West, than there has been during the past year.

So far as the foreign wool trade is noted, there has been a very manifiest advance in all the markets of the continent of Europe, during the past season, and this advance seems to be of a permanent nature. The last number of the London Farmers' Magazine, received by us, says: The wool trade in Great Britain continues in a highly prosperous state. The great advance realized upon foreign and colonial wools at the last public sales, together with the small stocks of English on hand, have tended to keep up the excitement. France has, recently, decreased the duties levied upon imported wool, and the consequence has been that, in 1855, her imports were 88 millions of pounds, against 57½ millions of pounds the year before. These are facts of interest to the wool-grower at the present time, which should tend to encourage him to go on with the improvement of his flocks, and to grow only the best varieties of wool. For it is the finer grades which are most in demand, and it is easier to keep a sheep whose fleece is worth $1,50, than one whose wool will bring its owner but 60 or 70 cents.

The prices of the two leading markets, for the several grades of American wool, are:

	NEW YORK.	BOSTON.
American Saxon fleece	46@54	55@60
Full blood Merino	42@45	47@50
¾ to ⅝ Merino	40@42	42@46
Native and ¼ Merino	35@38	35@37½
Mixed Western lots	33@40	33@40

[Michigan Farmer.

PARSNIPS FOR MILK COWS.

When parsnips are given to milk cows, with a little hay, in the winter season, the butter is found to be of as fine a color and excellent flavor as when the animals are feeding in the best pastures. As parsnips contain 6 per cent. more mucilage than carrots, the difference may be sufficient to account for the superior fattening as well as butter-making quality in the parsnips. In the fattening of cattle, the parsnip is found equal if not superior to the carrot, performing the business with as much expedition, and affording meat of exquisite flavor, and of highly juicy quality; the animals eat it with much greediness.

SUNFLOWER seeds are said to be the best known remedy for founder in horses. As soon as ascertained he is foundered, mix one pint of the seed whole with the feed, and an entire cure may be expected.

CLAY is frequently sought for by horses, and eaten with avidity, and, it is believed, with decided benefit to their health.

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HOW TO JUDGE A HORSE.

A correspondent of the Prairie Farmer, contrary to old maxims, undertakes to judge the character of a horse by outward appearances, and offers the following suggestions, the result of his close observation and long experience:

If the color be light sorrel or chestnut, his feet, legs and face white, these are marks of kindness. If he is broad and full between the eyes, he may be depended on as a horse of good sense, and capable of being trained to anything.

As respects such horses, the more kindly you treat them the better you will be treated in return. Nor will a horse of this description stand a whip, if well fed.

If you want a safe horse, avoid one that is dish-faced. He may be so far gentle as not to scare; but he will have too much go-ahead in him to be safe with everybody.

If you want a fool, but a horse of great bottom, get a deep bay with not a white hair about him. If the face is little dished, so much the worse. Let no man ride such a horse that is not adept to riding—they are always tricky and unsafe. If you want one that will never give out, never buy a large, overgrown one. A black horse can never stand heat, nor a white one cold.

If you want a gentle horse, get one with more or less white about the head; the more the better. Many suppose that the particular colored horses belonging to the circuses, shows, &c., are selected for their oddity.—But the selections thus made are on account of their great docility and gentleness.

PORK TRADE OF THE WEST.—A late No. of the Cincinnati Price Current sums up the Pork trade for 1855–6, and gives the following recapitulation of totals of hogs killed in the several States:

	1854–5	1855–6
Ohio	606,064	661,197
Illinois	369,862	412,307
Tennessee	14,200	62,400
Missouri	130,502	189,144
Kentucky	341,299	420,834
Indiana	501,325	379,001
Iowa	92,291	163,504
Wisconsin	37,500	45,500
Grand Totals	2,068,042	2,430,887
		3,068,042
Increase this season		542,845

In addition to this increase of hogs, the editor puts down 11 per cent. for increased weight last year over the previous. This increase is equal to 229,453 hogs, and the total increase stands as follows:

Increase in number	342,845
" " weight	229,453
Total increase	572,298

To prevent cows holding up their milk, feed them at the time of milking.

A KNOWING HORSE.

"E. M.," of Belchertown, writes to the Amherst Express about a very intelligent horse of which he is the owner. The following incident, among others, illustrates the matter:

"One day last week he was driven a few miles out of town, and on his return, some time in the afternoon, was fed with meal and cut-feed as usual, but for his supper he had nothing but dry hay, which did not agree very well with his sense of right, after traveling twenty miles with a load through snow drifts. However, he kept his thoughts to himself till we were all out of the way for the night; then, sundering his rope in some way, he passed through the cow stable, crossed the barn floor and the carriage-room to the granary, at the further end of the barn, some forty feet, where he had often seen us get the meal for him; he there found two bags of meal standing near the bin, tied up tight, but the top one being too heavy for his purpose, he threw it aside, and after examining the other bag, which weighed between fifty and sixty pounds, he took it in his teeth, and carried it about twenty feet, to a clean spot on the barn floor. Finding it difficult to untie it, he cut a hole in the side and shook out about a peck of meal, and ate what he wished; and seeing the cow (the only companion he has these long winter nights) looking with a longing eye at his pile of meal, he took up the bag again, and carried it about ten feet further to her manger, and shook out some of the meal for her. They were found in the morning feasting together."

HOW MUCH SHOULD A COW EAT.—Cows to give milk, require more food than most farmers imagine. S. W. Johnson, writing from Munich to the Country Gentleman, gives an interesting report of some experiments which have been made in Bavaria, from which the following is an extract:

"Our trials have confirmed the view that cows, to give the greatest possible quantity of milk, must daily receive and consume one-thirtieth of their live weight in hay, or an equivalent therefor. If more food be given it goes to the formation of flesh and fat without occasioning a corresponding increase in the yield of milk, but if on the contrary, less food be furnished, the amount and value of the milk will be greatly diminished."

IT IS stated that Dr. Rebman, a missionary, has verified the existence in Africa of an immense sea, without outlet, twice as large as the Black Sea, between the equator and ten degrees south latitude, and between the twenty-third and thirtieth meridian. It is designated Ukerewe, or Inner Sea.

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HORTICULTURE.

BUDDING.

The following article on budding will be in season for those who wish to try their hand at it. We think it is so fully illustrated, as to be entirely comprehensible to every one who will carefully attend to it. It is an excellent mode of propagating many kinds of fruit, and well worth the study and practice of all who have taste and leisure to attend to it. Like all similar operations, it must be performed with care and skill, to succeed well, although it is a skill that any one may acquire with a little pains-taking. It is an excellent mode of propogating choice varieties of plums upon the native or wild stock. We have known them to come to bearing in three years. If an actual budding knife cannot be obtained, something else that comes nearest in shape of it will answer for limited operations:

Fig. 1.

Fig. 3.

Fig. 4.

Fig. 5.

Budding consists in introducing the bud of one tree, with a portion of the bark and a little adhering wood, beneath the bark of another, and upon the face of the newly forming wood. It must be performed while the stock is in a state of vigorous growth. An incision is made lengthwise through the bark of the stock, and a small cut at right angles at the top, the whole somewhat resembling the letter T, fig. 1.

Fig. 2.

A bud is then taken from a shoot of the present year's growth, by shaving off the bark an inch or an inch and a half in length, with a small part of the wood directly beneath the bud, fig. 2. The edges of the bark, at the incision of the stock, are then raised a little, fig. 3, and the bud pushed downwards under the bark, fig. 4. A bandage of bass, corn-husk, or other substance, is wrapped around, covering all parts but the bud. The pressure should be just sufficient to keep the inserted portion closely to the stock, but not such as to bruise or crush the bark, fig. 5. The shoots containing the buds should be cut when so mature as to be rather firm and hard in texture; they are usually in the best condition after the terminal bud has formed.

To prevent withering, the leaves must be immediately cut off, as they withdarw and exhale rapidly the moisture from the shoot; about one quarter of an inch of the footstalks of the leaves should remain, to serve as handles to the buds while inserting them, fig. 6. After being thus divested of leaves, they may be safely kept a week in a cool damp place, or sent hundreds of miles in damp moss, or encased separately in thin oil-cloth. When, by growth, the bandage cuts into the stock, usually in ten days to three weeks, it must be removed. The bud remains dormant till the following spring, when the stock is cut off two inches or more above it. If cut closer, the end of the stock becomes too dry, and the bud often perishes. All other buds must be then removed, and all the vigor of the stock or branch thrown into the remaining bud, which immediately commences a rapid growth.

To secure a straight and erect growth, the new shoot, when a few iuches long, is tied to the remainieg stump of the stock, fig. 7. By another month, no further support will be needed, and the stump may be wholly cut away, and the wound allowed to heal by the rapid formation of new wood.

Buds inserted by midsummer, may be made to grow the same season by heading down the stock when adhesion has taken

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place; but although often attempted, no advantage has resulted from this practice, as the growth is comparatively feeble, and in consequence of its badly matured wood often perishes the following winter. Even where it escapes, it does not exceed in size at the close of the second season the straight and vigorous shoots of the spring.

The essential requisites for success in budding, are *first*, a thrifty, rapidly growing stock, so that the bark will peel very freely. *Secondly*, a proper time; not too early, when there is little cambium, or mucilaginous cement between the bark and the wood, for the adhesion of the bud—nor too late, when the bark will not peel freely, nor the subsequent growth sufficiently cement the bud to the stock. *Thirdly*, buds sufficiently mature. *Fourthly*, a keen flat knife, for shaving off the bud, that it may lie close in contact upon the wood of the stock. *Fifthly*, the application of a ligature with moderate pressure, causing the bud to fit the stock closely.

Fig. 8. Fig. 6. Fig. 7.

Various modifications have been proposed for the improvement of budding. One is to make the cross cut at the bottom of the long slit instead of at the top, as the latter is supposed to impede the descent of nourishment. Another is, to raise the bark all on one side of the slit, making a small notch in its edge for the bud, this mode being supposed to avoid the bad consequences of the mutilation of the wood by the knife. But these modes are both inconvenient, and are found to possess no advantage in practice; the supposed evils they are intended to obviate being too small to take into account. Making a square cut from the upper end of the bark of the inserted bud, so that it may fit in close contact with the bark of the stock at the horizontal incision, to receive the returning sap, though strongly recommended, has been found of no utility in practice, as the union takes place wholly between the two faces in contact.

The English practice of taking out the small portion of the wood cut from the shoot, has been found in the climate of this country not only useless, but really detrimental. Indeed, it often happens that buds of the cherry and other trees of rather spongy growth and slow adhesion, succeed much better when a thick portion of wood is taken off with the bud than otherwise; the wood in such cases assisting in the retention of of moisture until cemented to the stock.

When stocks are in the best condition, it is unnecessary to raise the bark any further that to admit the lower point of the bud, which, as it is pushed downwards, performs this operation in the most perfect manner. When the bark does not peel freely enough for this purpose, success becomes very uncertain.

Budding is performed in summer, grafting in spring, and both have their advantages. Budding is a simpler operation, and more successfully performed by a novice. It is the best means to multiply the peach and nectarine, grafting very rarely proving successful. It is more rapidly performed, and at a season not crowded with the labors of transplanting. It admits a repetition the same summer, in cases of failure, the stocks remaining uninjured. But in all cases thrifty stocks are needed, while grafting will succeed on those older and less vigorous. Grafting requiaes less care subsequently, as no ligatures need removing, nor stocks heading down, and may be conveniently employed as a remedy for failures in the previous year's budding. In England, where most fruit trees do not make so rapid a growth as here, budding is less esteemed; while from the moisture of the climate preserving grafts from dying, grafting becomes more successful there.

Figure 8 represents a proper budding knife. They can usually be found in the principal hardware stores of the country.

Chufas, or Earth Almonds.—Last year the Patent Office distributed seeds of this valuable esculent for cultivation. One of the recipients, and the only one who has made a public report, we see by advertisement offers the product of the Patent Office gift for sale. Since we have seen that gentleman's favorable report may be influenced by pecuniary considerations, we are disposed to attach but little weight to his statements, and prefer to hear from others, whose ideas of

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the object of the Patent Office distribution will be more liberal. We have no idea that the Government furnishes valuable seeds for the purpose of giving opportunity for the growers to make money of the produce.—Our view is, that it is the duty of the recipient to furnish free any surplus he may have to others as he received it.

[Western Agriculturist.

VEGETABLE AND FRUIT GARDEN.

VEGETABLE GARDEN.—Thinning, hoeing, and cultivating the growing crops, are the principal routine operations. Fork the earth between the rows of onions, carrots, and, indeed, all crops that it is desirable to keep in active growth, and the drier the weather, the more necessary the operation. The advantage of drained soils will again be apparent from the continued vigor and growth of the plants upon them. The increased porosity of the soil, consequent upon the admission of air to all its parts, enables it to absorb, to its fullest extent, the rain-water as it falls from the clouds. On the other hand, undrained lands (unless gravel or sand) cannot absorb an appreciable quantity of water during a heavy summer shower. It runs off at the surface to the lowest point; for this reason, drained lands really contain and have constantly present, more moisture than those unventilated.

Parsnips and beets may be transplanted to fill up vacancies; these will grow readily, if dull weather can be had for their removal; if not, pick off most of their leaves, to lessen their evaporating surface.

CELERY.—Young plants, at least for the early crops, should be transplanted from the seed-bed into a rich pulverized soil; set them about three inches apart, and they will remove with small balls of roots when wanted for final planting.

The striped bug is frequently on hand just as young melon and cucumber plants are at their most tender stage. We have seen them completely routed by watering the plants with a liquid mortar of clayey soil and cow manure, without any apparent injury to the young plants.

MULCHING.—If possible, mulch between the rows of all crops; short grass from lawns, refuse hay, leaves—anything, in fact, that will loosely cover the ground, should be employed for this purpose. This will retain the moisture, and very effectually prevent the growth of weeds.

HARDY FRUIT.—The results of the past severe winter are now becoming apparent. Young fruit trees that were seemingly unhurt, and commenced growth as usual, have produced a few sickly leaves, of a yellowish color, and ceased growing. On examination, it will be found that the bark is discolored, and parts easily from the wood, especially on the south side of the stem. They should be cut down at once to healthy wood.

PEARS ON QUINCE.—There are various opinions on the merits of so-called dwarf pears. We are too liable, in our horticultural zeal, to push matters to extremes. It requires a long series of well-tried and closely observed experiments to establish a horticultural fact. With the same treatment, a Bartlett will fruit as early on the pear as a Glout Morceau on the quince stock, and, in nine out of ten cases, the latter will excel the former in growth. No doubt, grafting the pear on the quince was at first resorted to with a view of rendering a few of the most luxuriant growing varieties more productive, and their success led to an indiscriminate use of the quince as a stock for the pear, without reference to the degree of vigor possessed by the numerous varieties. The same has happened with roses, and *budded* roses are now condemned by many, although amateur rose growers well know that many of their finest sorts are never seen in their greatest perfection, unless grafted on a suitable stock. Many pears grow with great vigor even on quince, and unless skilfully managed during summer, by checking growth, they will not fruit earlier than when on pear stock.

The most essential point in the culture of fruit trees undoubtedly lies in summer pruning. Without this, our best treatment will not prove continually remunerative.

STRAWBERRIES.—Clean away all the young runners, unless required for increase, and keep the plants distinct, and free of weeds.

RASPBERRIES.—Thin out the *young* canes as they grow, and cut out the old stems as soon as the fruiting season is over.

GRAPES.—Pinch the points out of the fruit bearing branches four or five eyes beyond the fruit, but do not, as yet, disturb any of the lateral, or young side shoots, from the present year's growth. Thin the branches to one for each shoot. It is a notorious fact, that most of our hardy grapes are rendered unhealthy and unproductive through excessive cropping.

GRAPERY.—Thinning the bunches having already been attended to, thinning the berries will now require attention. Shouldered bunches may require tying up and spreading to allow the berries to swell. It is difficult to establish definite rules as regards the exact amount of fruit a vine is able to mature. Attempts have been made to form rules according to the diameter of the stem. This may be found tolerably accurate when all are under similar treatment; but a well-ripened cane, half an inch in diameter, may perfect a crop of eight pounds, when a cane double the thickness, would not ripen as many ounces. It is not the quantity or size

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of the shoot that is all-desirable, but its quality as regards matured growth. The great error, in most of our horticultural advice, is a tendency to generalize upon insufficient data. It is a mistake for any one to suppose, that what he finds good for his own guidance, under *his* system of management, will be equally suitable to the million under *their* various modes of management. Keep the atmosphere moist by frequently sprinkling the house with water; this will tend to prevent mildew, but when it does show itself, use sulphur dusted over the house. Syringe the vines occasionally, but dashing water through a force pump on the tender foliage, is not beneficial or natural. Ventilate exclusively by the top, and leave them open, to a certain extent, both day and night. If managed as above, there will be no danger of bad colored grapes. "Ventilate early in the morning, and shut up early in the evening," is common advice, and those who adopt such a course need not be surprised if their fruit is deficient both in color and flavor. *The fruit will ripen earlier when the temperature is kept cool in the absence of light.*

Vines that are treated on the short spur pruning system, must be stopped an eye, or, at most, two, above the fruit bunch. It is well to encourage all growth that is possible. *Close* summer pruning is sooner or later ruinous to the plant if persevered in. We confess to having advocated a different course several years ago, but experience, the best of all monitors, has taught us otherwise, and, as a celebrated writer has remarked, "of what use is life without the hope of improvement?" [Horticulturist.

Striped Bugs.—Mr. G. G. Negley informs us that he gets clear of the ravages of the Striped Bug, by dusting his vines when dry with the finest dust or sand he can obtain from the turnpike, where the limestone and sand is ground to powder by wagon wheels. This fine dust adheres to the leaves, and to the stem; and the bug, having no relish for a mouthful of sand, retires. He has followed the practise for five years, and has never been troubled with the bug. Remember, the dust must be fine enough to adhere to the vines when dry.

[Western Agriculturist.

To Preserve Strawberries Whole.—Make syrup boiling hot, and having picked fine large strawberries free from the hull, (or, if preferred, leave them and a half an inch of the stem on) pour it over them; let it remain until the next day; then drain it off and boil again; return it hot to the fruit; let them remain for another night; then put them into a kettle and boil gently for half an hour; cut one in two; if it is done thro' take them from the syrup with a skimmer, and spread them on flat dishes to cool; boil the syrup until thick and rich; then put the fruit into glass jars; let the syrup cool and settle, then pour it carefully off from the sediment over the fruit.

Striped Bug.—J. H. Davis of Cartsville, Va., says that common fine black pepper dusted over vines, when they are attached, will destroy the striped bug. Applied in the morning, while the dew is on the vines, it will not injure them. [Southern Farmer.

Antidote for Poisons.—A correspondent of the London Literary Gazette, alluding to the numerous cases of death from accidental poisoning, says: "I venture to affirm there is scarce even a cottage in this country that does not contain an invaluable, certain, immediate remedy for such events as these—nothing more than a dessert spoonful of made mustard, mixed in a tumbler of warm water, and drunk immediately. It acts as an emetic, is always ready, and may be used with safety in any case where one is required. By making this antidote known, you may save many a fellow creature from an untimely end."

Fish with Legs.—The Rochester (N. Y.) Union states that Dr. Langworth, of that city, has obtained specimens of fish with four legs from a stream of water near Fort Defiance, in New Mexico. They are about seven inches long, and resemble a young codfish; the legs are like those of an alligato.r They have been sent to Professor Agassiz, at Cambridge, Mass.

Vinegar Animal.—Huc, in his travels in China, gives a curious account of the "Vinegar Animal," a polypus found in the Yellow Sea, which is placed in a large vessel filled with fresh water, to which a few glasses of spirits are added; and after twenty or thirty days this liquid is transformed into excellent vinegar as clear as spring water, very strong and of an agreeble taste. Additions of pure water without any spirit, are all that is necessary to insure a perpetual supply. Like other polypi, it propagates from a detached limb. The formid acid of ants and the exudations of the slimy grub which feed on our pear leaves, contain vinegar.

The New Jersey Geological Report states that the ocean is steadily and rather rapidly gaining on the shore. At Cape Island, the waves have gained on the beach fully a mile since the Revolution, and the rise of the tide on the eastern uplands is higher than formerly in the opinion of the oldest observers.

Adversity is the first path to truth.

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EDUCATIONAL.

"THE NEW ORTHOGRAPHY."

The phonetic method of spelling has a few recommendations that appear important, or at least worthy of some little attention from those who take an interest in the character of English literature. Many have looked upon it as an improvement which must, necessarily, in the course of progress, seize upon the language, and re-model it into greater symmetry and brevity. It purposes to affect *only the written language*, but it will affect that very materially, and if the intimacy between the *written* and *spoken* language is as close as it appears to be it cannot stop at that point. We shall see the written word robbed of its stable dignity entirely, and becoming only the vacillating shadow of a very capricious *pronunciation*. This result seems inevitable, without any deep study into the "new science," as it is styled; but we are willing to investigate the subject, and point out some of its most apparent workings. The effects are not hidden, but stand forth boldly upon the page with either a good or an evil purpose apparent in them, and a little inquiry will show us whether the good or the evil preponderates.

We have already seen our method of spelling materially improved by the forms of abbreviation introduced by late English orthographers, among whom our own Webster holds an eminent position, and deserves the gratitude of all who would have their mother tongue preserved from, not only umbrage, but corruption. But he has been censured, notwithstanding the acknowledged good he has done, by the more rabid among conservators, for his innovations; and in numerous instances he retracted in obeisance to public sentiment. He did not look upon *convenience* as supreme above both *elegance* and *chastity*, but labored for the preservation of these latter qualities with all the zeal of a progressive taste. It is a settled conviction with orthographers, that our language is gradually assuming a more permanent form, and becoming more unique and concise, both in spelling and usage. That is to say, it is incorporating itself more and more into a *nationality*, (it has been termed a *mongrel*,) and if left entirely to the modifying influence of that national sentiment of which it is the channel or vehicle, we have nothing to fear for its preservation and ultimate strength of tone. It will adapt itself to the most condensed and powerful expression, and if the matter were looked upon through the right kind of glasses, it would be found that the *condenser* should be applied to *forms of expression*, which bear upon the choice of words, and not to the *written language*, which would only affect the *use of letters*. The language is ever in readiness with *one word* to express volumes, and with the *history* of that one word to electrify with feeling. Our language is not after all as voluminous as the German, which phoneticians regard as almost a perfect model in its orthography, and this shows us plainly enough that the mere spelling of words has but little to do with brevity. The trouble lies in the fact that words—more than letters—are used without regard to their fitness, and small ideas are too much elaborated. It often occurs that a very worthy idea is *buried alive* among superfluous and stupid expressions, and if phoneticians were, instead, a sect of modern Laconians, they would find an ampler and more fruitful field of labor.

But the *histories* of words—the characters with which they are stamped, and the power which they derive from those characters—exist almost wholly in their written form, and their relation to the eye is of such vast importance to us in this age of much reading and little memorizing, that we cannot possibly permit it to be destroyed, as is now proposed. We do not see enough gain in the experiment to counterpoise so great a loss as would be the *written existence* of our language. If the entire labor of learning to spell were done away with, our literature would be the loser still; but it must be remembered that English orthography will be full as complicated and difficult to learn, while written forms cannot possibly be reduced more than *one-tenth*. A small gain for so much loss. There are too many "strong connections, nice dependencies," to be involved and ruined for so doubtful an advantage. But our "Reformers" are not at all contented with the manner in which our language adapts itself to every present crisis, and becomes the intellectual pulse of the people. They are for no *moderate reforms*,

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and in the adoption this *new science* do not stop to think of spoliation, or sacrifice—the spoliation is the poetry, history and associations of the written word, together with its relation to the eye—and the sacrifice is *the English Alphabet*, as now used.

Let us for a moment contemplate this havoc. Few, even among English scholars, weigh the importance and appreciate fully the strong-drawn, beautiful, and almost unrivalled peculiarities of English literature. The spoken word in many instances has a swarm of synonyms, (synonyms of pronunciation,) but the written word rarely, or *never* has an exact synonym. Perfect synonyms of signification cannot long exist in usage—except in a few instances of nouns—but the same pronunciation will necessarily be employed to express different ideas and relations, which can only be kept distinct by the peculiarities of written words. This permanent and yet pliable property of language would be entirely destroyed, in case mere sounds were represented by letters, and all traces of the origin of words would be wiped out—thus sundering all those kindred ties which now unite them into families, classes and groups, and give them an interest and inherited qualification. But the change would not stop here. If we were perfectly willing to lose the derivation of words, and did not consider it of more importance to possess a perfect index to their meaning than to the characters which express them, we could not, even then, trust that language in which is transcribed and perpetuated all our knowledge, to the flexible and never established codes of oral discourse. The different dialects of Germany tell us where her literature would have been if entrusted to the careless tongues of the ignorant; and in the illegitimate *gibble-gabble* of the rural shires of England we may see what would be the fate of our own in similar circumstances. The great concession made by the learned to the ignorant would be followed by others, continually, for there could possibly be no point at which it could stop in its depression of tone, until it reached the vulgar level of commonplace talk, which is now so very far beneath it. Every little caprice of habit or affectation in speaking, must necessarily be followed up by a change in the use of the written vowel, and the result would be that purity and distinctness would no longer exist in our national literature, while words would change places, and commingle confusedly. These facts are apparent, and yet as we have said, phonography has a few recommendations that seem to be important. These recommendations are not for our books, or for our children—for we have found it a poor condenser, and that it does not remove the *labor of learning*, so much exaggerated by its advocates—but for hasty jottings only, where time will not admit of the more permanent style. It has its use, but, like other useful inventions, if carried into ultraism will result in more injury than benefit. It should be restricted to manuscript, and not permitted to enter our books.

It can hardly be called a *new idea*, for the attempt was made to introduce it into the English language as long ago as the sixteenth century, and it has died away and revived at spasmodic intervals ever since. There was hardly a scholar at that time who did not regard it as a most unprofitable device, to bring about a motley mediocrity between the student and the dolt. Bacon launched at it a few expressions of contempt, and the mania subsided. It has been attempted in France several times with similar success. The profound *literateur* has stood up boldly to repulse the threatened outrage, and instead of permitting the *written* to be sacrificed to the *spoken word*, he has in many instances almost forgotten the latter, and always consid red it of minor importance. Although the French language is considered more complete in itself than the English, its written form admits of much more abbreviation to bring it down to only such characters as represent vowel sounds and stress. It is this fact that renders it the most polished and susceptible of delicacy and *finesse*. There are variations of the written word for every possible condition of style, mood, gender, and character, and yet, these variations are in a great degree independent of pronunciation. The task of learning to spell must be perplexing to French children, more than to English; but who ever heard of the youthful intellect being impaired by the labor of acquiring the use of the alphabet, when it is known that it is in itself the elementary principle of knowledge, as well as its most copious channel?

A. J. M.

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IMPORTANCE OF PUNCTUATION.

Do not be afraid of the period (.) in writing; it imparts terseness to the style; it affords relief to the reader. Some writers seem to delight in long drawn sentenses.—They supply the place of period with a semicolon; and, in many instances, with a simple comma. They appear to have an abhorrence of capital letters. Now, this is what we call inexcusable looseness in composition. Rules of punctuation are to be regarded less than a little common sense observation.—Wenever your sentence is complete, put in your period; and commence what you have next to say with a capital letter. Printers have orders, generally, to follow copy; but in doing so, an excellent article is often marred by the inattention of the writer, in not indicating his seperate sentences. Sometimes we venture an editorial change. But no man can punctuate another man's writing, as the writer himself can do, if he will only give it a little attention. The editor may even mistake the precise sense, and by the introducing of a point, vary the signficance of the passage. We are not very fond of the task. We prefer that those who write for our paper should mainly prepare their articles as they wish them to appear.

That punctuation has much to do with the precise meaning, may be illustrated by the following anecdote: "An English statesman having charged an officer of the government with dishonesty, was required by Parliament, under a heavy penalty, publicly to retract the accusation in the House of Commons. At the appointed time he appeared with a written recantation, which he read aloud as follows: 'I said he was dishonest, it is true; and I am sorry for it.' This was satisfactory; but what was the surprise of Parliament, the following day, to see the recantation printed in the papers thus; 'I said he was dishonest; it is true, and I am sorry for it!' By a simple transposition of the comma and semicolon, the ingenious slanderer represented himself to the country, not only as having made no recantation, but even as having reiterated the charge in the very face of the Parliament.

[Methodist Protestant.

GEOGRAPHICAL.

The climate of the Kahsia mountains, which lie north-east from the Calcutta, and are separated by the valley of the Burrampooter river from the Himalaya range, is remarkable for the inordinate fall of rain—the greatest, it is said, which has ever been recorded. Mr. Yule, an English gentleman, established the fact, that in the single month of August, 1841, there fell two hundred and sixty-four inches of rain, or twenty-two feet, of which *twelve and a half feet* fell in the space of *five consecutive days*. This astonishing fact is confirmed by two other English travelers, who measured thirty inches of rain in twenty four hours, and during seven months above five hundred inches. This terrific rain fall is attributed to the abruptness of the mountains which face the bay of Bengal, and the intervening flat swamps two hundred miles in extent. The district of the excessive rain is extremely limited, and but a few degrees farther west rain is said to be almost unknown, and the winter falls of snow seldom to exceed two inches.

HOW IT FEELS TO BE HANGED.

An acquaintance of Lord Bacon, who meant to hang himself only partially, lost his footing, and was cut down at the last extremity, having nearly paid for his curiosity with his life. He declared that he felt no pain, and the only sensation was the fire below his eyes, which changed first to black and then to sky-blue. These colors are even a source of pleasure. A Captain Montagnac, who was hanged in France during the religous wars, and rescued from the gibbet at the intercession of Viscount Turenne, complained that having lost all pain in an instant, he had been taken from a light, the charm of which defied all description.—Another criminal who escaped by the breaking of a cord said that, after a second suffering, a fire appeared, and across it the most beautiful avenue of trees. Henry VI., of France, sent his physician to question him, and when mention was made of pardon the man answered coolly that it was not worth the asking. The uniformity of the descriptions renders it useless to multiply instances. They fill pages in every book of medical jurisprudence. All agree that the uneasiness is quite momentary, and that a pleasurable feeling succeeds and colors of various hues start up before the sight, and that, these having been gazed on for a short space, the rest is oblivion. The mind averted from the reality of the situation, is engaged in scenes the most remote from that which fills the eye of the spectator—the vile rabble, the hideous gallows and the struggling form that swings in the air. [London Review.

TOTAL ABSTINENCE NOT A MODERN INVENTION.—Except thou desire to hasten thy end, take this for a general rule: that thou never add any artificial heat to thy body by wine or spice, until thou find that time hath decayed thy natural heat; and the sooner thou dost begin to help Nature the sooner she will forsake thee, and leave the to trust altogether to Art. [Sir Walter Raleigh.

Vigilance and dry powder are the best friends of struggling patriots.

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MECHANICAL.

EXPERIMENTS WITH METALS.

It will be remembered by many of our readers that on the 28th of February, 1844, while President John Tyler with a number of the members of his cabinet, and other distinguished personages, were on board the steam frigate Princeton, a huge wrought iron cannon, named the "Peacemaker," burst, while firing a salute, killing the accomplished Legare, Upsher and others. This sad accident, which created great sensation throughout our country, resulted in condemning at the time the use of *wrought*-iron as a material for cannon, but no satisfactory cause for the bursting of that gun has been made public until now. Under the direction of Major Wade three bars were cut from the exploded cannon, and submitted to a breaking test.—They were each two feet long and nearly two inches deep and broad, and were set on supports twenty inches apart, and the breaking force was applied at the middle. With a weight of 10,800 lbs. applied, the bar was defective .35 of an inch. The tensible strength of these bars was also tested in comparison with similar bars of "Russia" iron and English "Low-Moor" iron, and "American Bridgewater" hammered iron. The Russian iron yielded with a force of 62,644 lbs. to the square inch; the Low Moor yielded with a force of 56,103 lbs.; the Bridgewater with a force of 53,913 lbs.; while the bar of the Peacemaker only stood the strain of 38,495 lbs. The strength of the metal had been impaired by forging as 5 to 6; but it was very evident that it was very inferior metal. The strength of it ought to have been tested before it was made into a gun; if this had been done a better quality might have been selected, and the unfortunate accident described might not have taken place. Great care should be exercised in the selection of the kind of iron for the particular purposes designed. But how often is this precaution neglected; nay it is never thought of in too many cases. There is just as much difference in the quality of cast and wrought iron as there is in that of timber—as much difference between the strength of the highest and lowest qualities of iron as between bass-wood and hickory. With regard to the selection of materials and the necessity of looking to their quality, Major Wades makes some very judicious remarks. He says:

"What most demands attention at present is the ascertaining and prescribing the conditions to be exacted of the raw material, and its treatment up to, and exclusive of the castings; for if we do not make sure of obtaining a good quality of iron at the time of its casting into the mould all else is useless, and worse than useless."

Will our engineers and mechanics give heed to these suggestions? The safety of many lives are oftentimes dependent on the strength of a shaft, a beam or a plate of iron, the quality of which may never have been tested; and yet we are assured, in the work referred to, that different kinds of cast iron, when submitted to the hydrostatic pump, varied in strength from 1 to 8; that is one kind of cast iron possessed three times the strength of another kind; and yet all of these kind of irons had a respectable reputation in the market, and this difference in their strength never was suspected.

WARDROBE TRUNK.

This trunk, recently invented by J. McCracken, of Rochester, N. Y., consists in combining with a trunk the ornamental piece of furniture known as a wardrobe. Everything is attached complete, to wit, doors with looking-glasses, drawers, closet room, &c. When set up for use it looks like a substantial piece of mahogany cabinet work, genteel enough for a princess; but in the twinkling of an eye, it may be folded up into the form of a trunk, and is then ready for transportation; the trunk, which is of an ordinary size, constitutes the base of the contrivance.

If genius continues to progress, the time will come when families emigrating West will be able to carry houses with them, furnished complete, from kitchen to parlor, all within the compass of a flour barrel. Already has a stove been invented which uses lime instead of fire. Though hardly bigger than a man's hat, it will cook a domestic dinner at a moments notice.

IMPROVED IMPLEMENTS.

We find the following quotation in an article headed, "Implement Makers and the Royal Society of England:

"The continual development of agricultural mechanics, during the last ten or fifteen years, is a fact as remarkable as it is altogether satisfactory. It would be only idle for a moment to question, but that this advance is mainly attributable to the proceedings of the Royal Agricultural Society of England. Its endeavors to incite invention and encourage improvement have been ably responded to by the manufacturers; while the exertions of either have been fully appreciated by the agricultural public. At this present time, perhaps the greatest attraction, as certainly the most interesting feature, is the implement department of the Society's shows."

We think we could suggest another cause for these improved machines, and if the

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writer of that article will refer to the list of new agricultural implements patented at the United States Patent Office, and to the list of American implements exhibited at the World's Fair at London, Paris, etc., he will find the nucleus, if not the identical machines, which have so pleased him. All other countries combined, are now far behind us in agricultural implements. Our plows are more effective, although lighter. We have better reaping and mowing machines than any of those known in England before the introduction of McCormick's. Our grain threshers and separators took the premiums, both in France and England; while our small horse tools, such as root cleaners, horse hoes, cultivators, teddying machines, etc., are much superior to those known in Europe; and with deference, we believe our sub-soil plows and digging machines are far in advance of any they have yet seen. The necessities of a new country may perhaps be the cause why our mechanics are peculiarly inventive. And in no branch have they excelled more prominently than in the construction of agricultural implements.

[Working Farmer.

But the agricultural implements of the present are probably only the clumsy pioneers of what will be a few years hence. Who doubts it? EDS. FARMER.

COMPOSITION AND FORMATION OF STEEL.

Before a recent meeting of the Boston Natural Historical Society, Dr, Jackson gave an account of some researches into the composition and manner of formation of different kinds of steel. As commonly known, steel is a combination of carbon and iron, made by heating flat bars of pure iron in combination with charcoal. The carbon is first converted into oxyd of carbon, and then unites with the iron as carburet. The result of this process is known as blistered steel, from the babbles generated by gases upon its surface. Shear steel consists of parallel plates of pure iron and steel welded by folding, and uniting the bars of blistered steel. Cast steel is fused in pots of the most refractory material, and differs from cast iron, which likewise contains carbon, in this respect, that cast iron is a mixture of coarse aggregated matters, graphite and iron, whilst cast steel is a chemical combination of carbon and iron.

From the reasearches of Berthier it is known that manganese will form an alloy with iron. When iron is mingled with a considerable proportion of manganese, a brittle compound results; but when combined with a very small proportion of manganese, a steel of very fine quality is obtained, which has this advantage over carbon steel; carbon steel becomes coarse when tempered in thick masses, from segregation of the particles of carbon; but no such trouble arises with manganesian steel. Parties in England have lately introduced excelent wire for pianoforte strings, made of this kind of steel, as well as for cutting instruments and other purposes. In the wire, Dr. Jackson has found one and a half per cent. of manganese, and has established the fact that it resists, to a very remarkable degree, the action of hydrocholoric acid. Sixteen years since Franklinite Iron was manufactured by Mr. Osborn into very hard and fine steel. This steel required tempering at a lower heat than carbon steel. Many of our manganesian irons might be manufactured into steel by the simple process of fusion, and a steel of uniform character might be made without previous cementations with carbon.

A WONDERFUL INVENTION.

A correspondent of the News, writing from Austin, on the 18th of January, thus notices a new invention:

"The great invention of the age is Gen. Chambers' terra-aqueous machine; it has been privately submitted to committees of both branches of the Legislature, and I am credibly informed that it has been demonstrated to the entire satisfaction of all the members of both committees, that the invention is a valuable one, and likely to create an entire revolution in the means of transportation. It is represented not to have any wheels, and not to slide, and yet, by some peculiar arrangement, will, on a graded road, make forty miles an hour. The road will be much wider than the rail track, but will require no iron, and possibly cost less than a double track. It will cross rivers or bays at the rate of ten miles per hour. This is a short description of a machine applicable to both land and water. The inventor claims that the same principle may be applied to machines intended solely for water transportation, and that the speed of some twenty miles per hour may be obtained. The invention may seem too extravagant for credence, but as some men who have acknowledged mechanical skill, pronounce it a valuable invention, I deem it worthy of notice."

REMARKABLE WATCH.—At the French Exposition there was exhibited a watch which created much interest and admiration. It tells the name and day of the month, the equation of time, is a repeater, striking the minute as well as the hour; is a thermometer of tolerable accuracy, and winds itself up by the action of its own movement. The price of this ingenious piece of workmanship is 30,000 francs (over $5000.)

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For the Farmer.

BARK LICE.

MESSRS. EDITORS—Inasmuch as you invite none but the best talent in the State to write for your paper, I feel somewhat timid about offering anything for publication. Still, as there is much said about bark lice, I flatter myself that you may insert an article on that subject, from second or third rate talent.

Like doctoring a horse, or an ox, every one has his own remedy for the lice. I proceed thus: Take of soft soap a sufficient quantity to soap the trees, and add weak lye —say the last from the leach—sufficient to thin it so that it will spread like paint; then with a paint brush spread on a good coat—going over two or three times—and in two weeks the rains will wash off all the lice. I give all my trees a wash of soap and lye, in this way, every spring. It cleans them of all moss and black scurf, and leaves the bark green and healthy—at the same time destroying the eggs of all insects that may be on the trees at the time.

Many trees have been destroyed by the hard winter in these parts. E. R.

METOMEN, Fond du Lac Co., June 5, '56.

We are not conscious of having made any such distinctions in our invitations. We ask *all*, who feel the spirit moving in them, to write for the FARMER, and if we deem any communication undesirable to publish, the writer must of course excuse us for omitting it. But do not fear this; all communications like the above, giving practical experience, will receive a place in our pages. This, as we have repeatedly said, is the medium for the farmer to spread broadcast the mite which he may have added to the general fund of knowledge. EDS.

For the Farmer

OSAGE ORANGE.

MESSRS. EDITORS—I am trying an experiment with the Osage Orange, to solve the problem whether or not it can stand our northern winters. We are in latitude 43 deg. 54 min. north; longitude 89 deg. 25 min. west from Greenwich.

I first soaked a pound of seed 18 days in cold water, and planted, May 10th, in rows 2 1-2 feet apart—the seed about 6 inches apart in the rows, which gives me about 300 rods of plants. I now wish for answers to the following questions through the FARMER:

1st. How old must the plants be before cutting back, and how short should they be cut?

2d. When would it be best to transplant into their destined places, and how far apart should they be set?

3d. How is the best way to prepare the young plants for the winter?

4th. Is there anything more hardy that will make good hedges—where can it be procured—and how and when planted?

Will some one answer these questions?

I will keep the readers of the FARMER apprised of the success or failure of my experiments. Respectfully yours.

L. L. SWEET.

NEWTON, Marquette Co., May 10, 1856.

For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—I saw a statement of the origin of chess in your April number. Now, although I don't take for granted everything that is published, I do agree with the writer, and I think my investigation extends further than his. When I was 13 or 14 years old I heard some old men disputing about chess, and one said it came from the roots of winter killed wheat, while the other declared it did not, but he couldn't give any satisfactory history of it. I determined to satisfy myself. Accordingly I selected an old stack bottom for the ground of my experiment. The stubble had been burnt off previous to the building of the stack, and, luckily for me, the threshing machine saved me the trouble of sowing. There was no chess in the wheat; it came up all over the ground, and thick, too. The succeeding winter was an open one; the snow blew off and my wheat looked as though it never would have life again. But spring came, and with it little fine shoots, long and narrow, scattered over the ground. I found also some roots under the edge of the straw which did not winter kill. That grew and had very large heads of wheat, well filled. The former grew till about the middle of July, and headed out full of chess.

Then the thought struck me, that if people would cover their fields with straw in the fall, there would be no danger of wheat winter killing. I think it would be better in

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such case to rake it off again in the spring, with a good horse-rake. It would be but a small job, and would undoubtedly pay well. Next year I shall try it and let you know the result.

Some people contend that chess is natural to the earth, and that it will spring from no seed or root. If that be the fact, why don't we find it in spring grain? My second year from those chess roots grew some of the finest herd grass that I ever saw, and I don't recollect of its ever making another change after that. Yours, &c. B. T. M.

For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—As much has been said and written on the subject of winter wheat turning to chess, I have something to add. Notwithstanding the Scripture says, "every seed after its own kind," you wish this—for hundreds of years—vexed question settled.

Since fifteen years of age I have sowed wheat and harvested, and at this writing am forty-one years of age. Therefore, I do say that my experience in this number of years ought to go some way toward settling the question. In my mind it is settled conclusively that *wheat winter killed, will turn to nothing but chess.* For instance, I have sown wheat on new land, at least twenty years of my life, and have found, almost without any exception, on all low wet land, where water was on the surface of the ground for weeks, fall and spring, that chess was more likely to mature than wheat. Therefore, I for one ask your best scientific men to correspond otherwise, and I have more to say on this subject, and many other theories.

GEO. WEDGE.

P. S.—Your correspondent at Black River Falls, (76, in May number,) I should like to hear from again. He ought to know how soon a man can double his money and be honest. G. W.

SEXTONVILLE, June 3, 1856.

MESSRS. POWERS & SKINNER.—Although my former communication, making inquiries respecting the sprouting of fruit seeds, was not noticed, still perhaps you will not deem me impertinent if I express my satisfaction in learning by your magazine some important facts respecting the gravel mode of building.

Will it be consistent for you to publish something on the mode of building with the sun-burnt brick?—or can you inform us where information on that subject may be obtained? Respectfully,

HARRIET M. S.

We would apologize to our friend HARRIET, for having unintentionally mislaid her former communication, and assure her that it was not our intention to overlook it.

We are not sufficiently acquainted with the use of unburnt brick, to give any very reliable instruction on the subject. Our impression in relation to them is, that they are not altogether practicable for general use.

We wish some one who is acquainted with the subject would favor us and our correspondent with the desired information.

EDS. FARMER.

A WHOLESOME DRINK.

The excessive use of cold water during the sweltering heat of summer, often results in serious and alarming illness. It is therefore advisable that some beverage should be substituted for it, which those oppressed with thirst, can partake with safety. For this purpose, I am aware of no better or more refreshing drink than the following: Take of the best Jamaica ginger root, carefully bruised, two ounces; cream of tartar, one ounce; water, six quarts, to be boiled for about five minutes, then strained; to the strained liquor add one pound of the best white sugar, and again place it over the fire; keep it well stirred till the sugar is perfectly dissolved, and then pour it into an earthen vessel, into which you have previously put two drachms of tartaric acid, and the rind of one lemon, and let it remain till the heat is reduced to a lukewarm temperature; then add a tablespoonful of yeast, stirring them well together, and bottle for use. The corks must be well secured. The drink will be in high perfection in four or five days. This is a very refreshing and wholesome beverage, and one which may be largely partaken of without any unpleasant results, even in the hottest weather. Those who make use of old cider, will find this much superior as a common field beverage.

CUTTING AND CURING HAY.—All the grasses and clover are the better for being cut when in the flower, and before the seed is formed. In curing it, after letting it remain a few hours in the swath, it should be thrown into cocks to complete the curing process.

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DOMESTIC ECONOMY.

For the Farmer.

RECIPES FOR COOKING VEGETABLES.

ARLINGTON, May 23, 1856.

MESSRS. EDITORS—In answer to an inquiry of one of your readers as to the method of cooking the egg-plant, I send a few directions for that and some other vegetables, from an approved Receipt Book.

Respectfully, E. M. D.

EGG PLANT.

Boil them in a good deal of water, a few minutes, to take out the bitter taste, then cut in slices, and sprinkle a little salt on them. Then fry them brown on a griddle, with only butter enough to keep them from sticking.

STEWED EGG PLANT.

Take the purple kind, stew soft, take off the skin, mash it with butter and sweet herbs, grate bread over the top, and bake till brown.

JERUSALEM ARTICHOKE.

Scrape them, and put them in boiling water, with some salt. Boil large ones about two hours, then take up and butter them, or serve with melted butter.

SALSIFY, OR VEGETABLE OYSTER.

Boil till tender, then pour off the water, and add a little milk, a little salt and butter.

Another way is, to parboil it, scraping off the outside, cut it in slices, dip it into beaten egg and fine bread crumbs, and fry it in lard.

Another way is, to make a batter of wheat flour, milk, eggs, and a little salt. Cut the salsify in slices; after it is boiled tender put it in the butter, and drop this mixture into hot fat by the spoonful. Cook them a light brown.

MACARONI.

Mix a pint of milk, a pint of water, and a teaspoonful of salt; put in two ounces of macaroni, and boil till the liquor is wasted and the macaroni tender. Put on butter, or pour over some gravy. Cut the macaroni in pieces of three or four inches.

MACARONI PUDDING, TO EAT WITH MEAT.

Simmer one-fourth of a pound of macaroni in plenty of water, until it is tender. Strain off the water, and add a pint of milk, or cream, an ounce of grated cheese, and a teaspoonful of salt. Mix well together, and strew over the top two ounces of grated cheese and crumbs of bread. Brown it well on the top, in baking. It will bake in a quick oven in half an hour. It is appropriate to be eaten with boiled ham, or forms a course by itself, after meat.

For the Farmer.

LA CROSSE, May 24, 1855.

MESSRS. POWERS & SKINNER—Permit me, a reader of your paper, to address you, as I take great interest in the FARMER, and more particularly that which relates to the Ladies, Department. I wish you could establish such an one, and that the lady readers would each send a Receipe of some kind each month. I think they would *all* be gratified with the result. I for one have long thought of sending you some, for the sake of having them to refer to in cases of emergency. Some of them are for Burns, Croup, Washing, &c.

I send you one for washing, and perhaps will send you more, if agreeable to you. I subscribe myself, your most obedient and humble servant. E.

FLUID FOR WASHING.

Take three pounds sal soda, and one and a half pounds of lime; pour on 14 quarts of boiling water and stir well. Let it stand 24 hours; then pour off the pure water and bottle for use. It requires from a gill to a pint of this fluid for a washing—if the water is very hard, more will be required. It renders the water soft, bleaches the clothes, takes less soap, and does not in the least injure the finest fabric.

In reply to the foregoing suggestion, we would say that we will be found ever ready to publish all useful recipes, and especially those sent in by our lady friends. If enough of the right kind of material is furnished for a separate Ladies' Department, we will be very ready to establish one. We are decidedly anxious to increase the list of our lady contributors, believing that a larger aid from them would add greatly to the interest and usefulness of the FARMER. EDS.

HUNTING PUDDING.—One loaf baker's bread; half pound English currants; four eggs; teacupful brown sugar; half a pound beef suet; put in a bag and boil three hours. The bag should not be entirely filled.

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RECORD OF METHOROLOGICAL CONDITIONS,

At MADISON, Wisconsin, Latitude 43° 05' North, Longitude 12° 12' West. Altitude, 892 Feet above the Level of the Sea. MAY, 1866.

DAILY.		7 A. M.			2 P. M.			9 P. M.				
APRIL.	Ind. of Barom.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Temp'tr.	Force and Course of Wind.	Amount of Clouds.	Daily mean Temp'tr.	REMARKS.
1	28.77	50	3 E.	8	59	3 N.E.	8	54	2 N.	10	54.33	Thund'r st. afternoon and evening.
2	28.88	50	3 W.	8	50	3 W.	8	48	3 N.	10	48.33	Rained all the morning.
3	29.15	47	3 N.	8	52	3 E.	4	44	2 E.	0	47	
4	29.20	43	3 E.	3	54	3 E.	4	45	3 E.	4	47.5	
5	29.23	44	4 E.	9	52	3 E.	8	46	3 E.	10	47.33	
6	29.10	44	3 E.	10	50	3 S. E.	6	48	3 S. E.	8	47.33	Rained all night.
7	29.7	44	3 E.	10	49	4 N.	5	46	1 S.	0	47.33	Rained greater part of the night.
8	29.15	50	1 W.	6	64	1 N.E.	4	58			58.33	
9	29.17	56	1 W.	1	70	1 E.	3	60			62.66	
10	29.18	60	2 W.	2	50	1 E.	0	55	1 E.	0	56.33	
11	29.12	68	1 E.	0	74	2 S.	0	57	2 S. E.	8	62	
12	29.24	42	2 N.E.	10	45	2 N.E.	10	40	1 E.	8	32.66	Rained nearly all day.
13	29.13	44	2 E.	10	50	2 S. E.	10	47	2 S.	10	49	Rained, nearly all day and night.
14	29	56	3 S.W.	10	60	2 S.	8	55	1 S.W.	0	57.16	R'd in morning. Cleared up at noon.
15	29.8	57	3 W.	6	68	2 N.W.	0	54	2 N.W.	0	58.16	
16	29.16	48	3 N.	0	64	2 N.	8	53	1 N.	0	54.66	
17	29.5	46	1 N.	0	59	2 N.W,	0	44	2 N.	0	51.5	
18	29.4	57	1 N.E.	0	72	1 E.	0	60	1 E.	1	65.66	
19	28.97	70	1 S. E.	0	88	1 S. E.	0	78	2 S. E.	0	77	
20	29.15	70	2 E.	0	78	2 ESE.	0	59	3 ESE.	3	67.33	
21	29.21	60	4 S.	5	75	2 S.	2	60	2 S E.	2	66	
22	29.18	68	1 S.	0	84	2 S.W.	2	78	2 S.W.	5	76.33	
23	29.17	79	3 W.	8	92	2 N.W.	2	78	3 N.W.	5	82.5	St. & sheet lightning from 12—3 N.
24	29.17	76	3 E.	4	89	1 S. E.	2	60			71.5	
25	29.33	55	1 S.W.	2	71	2 S.	5	58	3 S.	8	61.33	Slight rain 9 P. M. Th'r st. in N.W.
26	29.15	58	2 N.W.	8	76	3 N.W.	5	69	2 W.	7	68	
27	28.92	60	1 S.W.	0	72	2 E.	6	59	3 E.	8	64.16	Rained a little.
28	28.94	63	3 E.	5	73	3 S. E.	4	58	3 N.E.	4	61.18	
29	29.7	62	1 S. E.	0	64	1 E.	0	50	4 N.E.	4	50	Very cold and chilly.
30	29.20	47	1 E.	3	67	2 S.E.	3	54	2 S.	5	57.33	
31	29.15	55	3 S.W.	8	73	3 W.	1	63	2 S.W.	4	63.66	Spr. of R. from 7 to 8 P. M.

N. B.—Extremes of Barometer indicated 28.72 on the 1st, and 29.36 on the 25th. Extremes of Temperature, 40° on the 12th, and 92° on the 23d. Mean Temperature for the month, 58° 49'. Average amount of rain.

EXPLANATIONS.—The Barometrical indications are noted three times daily, at 7 A. M., 2 P. M. and 9 P. M., and the average pressure of the 24 hours marked in the column—the maximum and minimum range in each month being noted at the end of the table. The variations of the Thermometer are given in three distinct columns, and a mean temperature ascertained by adding the temperature of the morning thrice that of noon and night and that of the next morning together, and dividing the sum by 6. The amount of water contained in the air in the form of vapor is ascertained by means of an Hygnometer—an instrument founded on the fact that evaporation takes place rapidly or slowly in proportion as the air is loaded with or free from watery vapor, and consisting of a thermometric arrangement, by which the relative humidity of the atmosphere is determined. The force of the wind is estimated by a scale from 1 to 10, in which one signifies a very light breeze, with a motion of about 2 miles per hour; 2 signifies a gentle breeze, with a speed of 4 miles per hour; 4, a strong wind with a velocity of 25 miles per hour; 6, a gale, moving at the rate of 45 miles per hour; 8, a violent gale, of 75 miles per hour; and 10, a violent hurricane, with a velocity of about 100 miles per hour. In the same manner is the amount of Cloudiness estimated by a scale, ranging from 0 to 10—0 denoting perfect clearness of sky; 10, complete cloudiness. The rain is collected in a Rain Guage, and measured by inches. The snow is measured as water after being melted.

In cases of Tornadoes, Hailstorms, Meteors, Aurora Borealis, &c., &c., the particulars attending them will be given in each case, and information in reference to their appearance, time of duration, and effect, will be thankfully received from any part of the country, if forwarded either to the WISCONSIN FARMER, or to A. SCHUE, M. D.

TO COLOR NANKEEN.—Obtain at the tannery a quantity of ground bark which soak in brass or copper over night; boil it smartly in the morning, wet your things to be colored, in alum water, put them in and give them a good boiling, some ley or soft soap added will make them much darker. By using copper instead of alum you can a make very fashionable color between a drab and a slate.

TO DESTROY CATERPILLARS.—A farmer in Massachusetts says that he has found the use of molasses very effectual in destroying caterpillars; that when they are in the nest he has smeared it over with molasses, and that none have ever escaped from it; that they cannot travel over a limb where the molasses has touched—that it does not in any way injure the tree, and that upon the whole, he likes it better than lighted torches, gunpowder, soap-suds, whale oil soap, or even the thumb and finger! A cheap and easy remedy. Let the molasses "work."

HARVEST DRINK.—Ten gallons of cold water, one gallon of molasses, one quart of vinegar, and one-fourth of a pound of ginger, well stirred together, make a healthful and refreshing drink for the harvesters, with which they will stand their labors well—a thousand times better than with rum.

BUCKWHEAT should be sown by the 20th or 25th of this month—two pecks of seed per acre.

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EDITOR'S TABLE.

The Wisconsin Farmer for Agricultural Premiums.

We are gratified to notice that many of the County Aglicultural Societies are adopting the FARMER for dollar premiums. This, aside from any mere personal interest on our part, we consider the best of policy, and just as it should be. True, many of that enterprising class of farmers who obtain premiums are already regular subscribers to the FARMER; but even in that case it will do no harm, as it will save them the necessity of paying for it the coming year. But, it is equally true that many other good farmers, from some strange apathy, carelessness, or, possibly, prejudice against book farming, are not subscribers to any agricultural paper; and all such accidentally getting it as a premium, will be likely to read it, and thereby become interested and permanent subscribers.

The true scope and purpose of all agricultural societies is, to benefit communities by increasing their agricultural and general knowledge. Can this best be done by giving a cash premium, which usually slips away without being hardly felt, or by a sterling agricultural book, or periodical, which will be likely to remain a permanent benefit in the household, perhaps for a generation? We think the answer is obvious to every thinking person.

True, the *almighty Dollar* is a fine thing in its place, but it would make a poor substitute for text books in schools, or for a dinner when we are hungry. It is about the same in agriculture—the dollar is spent, but the book or agricultural paper is not, usually, bought with it.

Put good agricultural journals in the hands of your neighbors, if you would do them a service. We hope all the agricultural societies in the State will concur with us in this opinion; and further, we are not so modest as not to say, that we hope they will adopt the WISCONSIN FARMER as a prominent premium in their lists. We are the more anxious for this, for the reason that we mean to make the farmer just the thing that every progressive farmer in the State will find indispensable for him to have, when he gets acquainted with it.

Publishing, as we shall, the entire proceedings of the State Agricultural Society; together with all the County Agricultural Societies—this information alone will be invaluable to every one; but in addition we shall also publish, from month of month, the fullest possible amount of general valuable information on all subjects interesting to farmers and business men. In a word, we mean to make our journal indispensable to every business man in the State, and naturally desire all the aid possible, in rapidly extending its circulation. Friends of Agriculture, and Horticulture, and officers of agricultural societies, lend us all the aid you can, and we will do our best to reciprocate.

Transactions of the N. W. Fruit Grower's Asso'n.

This interesting document is at length before us, and its perusal affords especial interest. It appears that they do not intend to hold a convention the coming fall, but to next meet in the autumn of 1857, at Milwaukee. This is all right; Wisconsin should have such a special good opportunity of exhibiting to the prominent fruit culturists of the nation her progress in Horticulture.

We hope that by that time the State will be able to do itself a fair degree of credit, although we fear it will be found a long way behind some of the other Western States not much if any older. The high compliments bestowed by eastern men, like BARRY and others, upon our Western fruits are, to say the least, highly flattering and encouraging to us. The effort on the part of nurserymen to get up a combination for uniform prices for trees, may be well enough, but we think it will not succeed.

Their proposed expose of the frauds and deceptions of Tree Peddlers will be a good thing, if they can devise any effectual remedy. Many people, and especially those who are too wise to take and read the papers, are bound to be gulled in spite of all timely precautions on the part of others.

The discussions on fruit and fruit trees are extensive and highly instructive. We shall publish some of the more interesting portions in succeeding numbers. We think it a pity that these Transactions cannot be got out earlier. A year lost in this country is a great consideration.

Seymour & Morgan's Improved Self-Raking Reaper.

Those wishing to purchase these machines had better send in their orders without delay, as the agent, S. L. SHELDON, Esq., informs us that he can fill but a limited number—the demand being greater than the supply.

State Fair—Judges and their Compensation.—

In order to make the judges more prompt, and certain to be on the ground and ready to serve, the Executive Committee adopted a rule to pay all judges who reported themselves promptly at the time and place specified in the Premium List, a proper compensation for their services. It is to be hoped that this, together with the laudable desire to be useful, will prompt all who reasonably can to serve; especially as the various judges have been selected with as much reference to fitness and capability as possible, and it is a difficult task under the excitement and hurry of the moment, to fill up vacan-

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cies. We are calculating on an excellent fair, and particularly wish the aid of all the good and efficient workers throughout the State. We feel that the importance of the subject demands it, and hope we shall not be disappointed in our expectations.

"Puffing"—

"We wish to say to 'O. T. C.' and all others writing "puffs" for new villages, that they will hereafter be charged for at the rate of $15 per column. We wish to have it understood that we cannot afford to do that kind of business for nothing."

[New Lisbon (Adams Co.,) Republican.

We say ditto, friend RICE. Why should an editor's time and space be occupied without compensation any more than any other business man's? In the first place, admit nothing into the news columns of your paper that you cannot sanction, then if it is for the benefit of any particular person or persons, it is no more than right that you should have a proper compensation. Editors are human, and like other people want pay for their work; and, judging from our own experience, they generally need all they get. It is an erroneous idea that many otherwise sensible men have obtained, that paper, ink and type, cost nothing.

The Seventh Annual Catalogue

Of LEWIS G. MORRIS is received. The illustrations of his fine stock are admirable. Many of the animals are models for study, and like most other models (the pictures,) are probably full as perfect as the originals. He proposes to sell off his entire stock, except the Short Horns, at auction, on the 24th and 25th of June—thus giving a preference to this breed over all others for a subsequent business. Notwithstanding all differences of opinion, the Short Horns seem to be the prevailing favorites with most of the fine stock breeders in this country. But our farmers must not invest too much money in very fine stock, until they have plenty of fine cultivated grasses and hay, and perfectly good shelter for them. They cannot stand our coarse fare with out deterioration.

The Advertisement of H. B. Merrell & Co.

Will be found in the advertising department of this number, which all in want of anything in the clothing or furnishing line would do well to notice. Their stock is extensive, selected with care, and for sale cheap.

N. H. State Agricultural Society.—

With the compliments of the officers of the New Hampshire State Agricultural Society, we have received the Transactions of that society for 1854. It is a good sized volume, containing 400 pages of excellent matter, prepared by the Secretary, JAMES O. ADAMS. The mechanical execution of the work—like that done by all State printers—is rather inferior.

J. J. Man & Son's Reaper and Mower.—

This month we insert an advertisement for this machine—manufactured at Michigan City, Ind., by Messrs. Haskell, Barker & Aldridge. As yet it has been but little used in Wis., and of its merits we have no criterion to judge except of the testimonials it has received. Last season at a trial of Reapers at Janesville, under the auspices of the Rock County Agricultural Society, it received the first premium, and other prominent farmers of Rock County put their signatures to high recommendations for this machine. Z. P. Burdick, Esq., President of the Agricultural Committee of Rock Co., writes to the manufacturers as follows:

"I was present at the Reaper trial in Rock county Wisconsin, in the summer of 1855, on the land of Dr. Jno. Mitchell, in the city of Janesville. I am decidedly of the opinion that your Reaper performed its work the best of any one on trial, and justly received the first premium. As a Reaper and Mower combined machine, I should give it the preference. I shall be glad to see many of your admirable machines introduced into actual service in this country. Z. P. BURDICK.

Janesville, Feb. 6th, 1856."

Lake Side Water Cure.—

We are truly happy in recording the fact that the Lake Side Water Cure is beginning to be duly appreciated, for the proprietors have spared no pains to make it a first class Establishment,—the first probably in America. Their lavish expenditures and arduous toil, bestowed upon it are deserving of remuneration, and the prospect now is that it will be not only a highly useful institution, but a paying concern.—The whole thing is now under the management of the celebrated Doctor E. A. KITTREDGE, of Boston, a physician whose skill and experience is probably unsurpassed in this country, both in the old and the new way of doctoring. He has already performed some great cures at "Lake Side" and his assiduous attention to his patients' general humor, &c., have endeared him to them and the visitors in a remarkable degree. The place is evidently calculated for him and he for the place. In addition to the baths common to such an institution—there is in operation one of the celebrated Electro Chemical baths, which are so much in use all over the Eastern states now, and which the Doctor declares "will take all the nonsense out of a man in short order" in short everything is *au fait* at Lake Side and the people of the Western states can have no excuse, hardly, for remaining sick.

The following, from the Boston Chronicle, shows the high esteem in which the Doctor is held where he has long been known and his works thoroughly tested:

"Among the valuable contributions which the Great West is taking from us is Dr. E. A. Kittredge, perhaps better known to us as "Noggs" of the Water Cure, and humerous literature of the day. Having gone out to see a Water Cure establishment in the vicinity of the capital city of Wisconsin, he has become so enamored of it, and it of him, that he has sent back orders to his

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Boston friends to sell out his city house and country snuggery, and henceforth is to belong to the great *free West*. We congratulate the infant giant on this acquisition. Noggs is nature's own doctor, and health comes to his honest beck, altogether too quick for the benefit of professional revenue. He naturally belongs to that region where the physicians can allow Nature to do her best for his patients, without fear of starving for his own part. We hope he will let us hear from him in his new home, for here in this strait-laced community we must laugh some or die."

Splendid Farm For Sale.—

A Farm of one hundred acres located near the city of Madison is offered for sale in this number of the Farmer. We know the farm—have been all over it, seen its beauties and advantages and know they are not over rated in the advertisement. A portion of the farm might be laid off and disposed of to good advantage in small lots and leave land sufficient for an excellent grazing, grain or moddle farm; It is unneccessary to add that any one desirous of purchasing a piece of property like the one described, will find it to their advantage to look at this before selecting a location.

Wisconsin F. G. A.—

A meeting of the Executive Committee of the Wis. Fruit Grower's Association was held in the city of Milwaukee, on the 11th of June, for the purpose of deciding upon the days of holding their annual Exhibition and Convention. In view of the disastrous effects of the past winter on the fruit trees in the State, and the present uncertainty in regard to the fruit crop of this season, it was determined to postpone such decision until the 15th of July next.

Strawberries.—

We take pleasure in acknowledging the receipt of a superb jar of Strawberries, from our very kind friends, Mr. and Mrs. H. J. Starin, of Whitewater. They consisted of three choice varieties, Hovey's Seedling, Mc Evoy's Superior, and the Crimson Cone; and all superb specimens in their way.

The worthy donors are among the *lucky* few who have labored with pains and perseverance, as well as with taste and skill, for long years, to get up a fine orchard and fruit garden. All who have passed their charming place, or partaken of their divers choice fruits, know how well they have succeeded. They are amateurs in these things of whom the beginner, or even the advanced scholar, can learn much that is desirable to know. They have our thanks.

The Aproppriation to County Societies.—

In answer to numerous inquiries as to the proper form of application for the appropriation made to aid County Agricultural Societies, we publish the following letter showing the requirements of the Secretary of State before issuing an order on the Treasurer for the money. The law referred to was published in the April number of the Farmer, page 185, and all who wish can there consult it. We therefore omit to republish it. It appears that old societies are not entitled to the appropriation, unless they are re-organized according to the provisions of the act; but it is hoped that the law will be so amended by the Legislature at its session in September as to obviate this difficulty:

Secretary's Office, Madison,
June 18th, 1856.

Messrs. Powers & Skinner,
Wisconsin Farmer Office, Madison.

Gents: The Secretary of State, in order to be able to judge whether or not County Agricultural Societies are duly organized, under an act entitled "An Act for the Encouragement and Promotion of Agriculture," approved March 31, 1856, will require a copy of the articles of association to be filed in his office, signed by the President and Secretary of the society, and attested by the corporate seal of the society, or verified by the oath of the President and Secretary.

Before any order will be issued by the Secretary of State on the Treasurer, a statement must be filed in his office, certifying the amount subscribed and actually paid into the treasury of the society, for the sole use and benefit thereof, for the year in question, which statement must be attested in the same manner as the articles of association, and by the affidavit of the Treasurer of the Society.

Herewith you will find a copy of the Act referred to, which please publish in connection with this communication, in answer to your and other enquiries on the same subject. Respectfully,

John W. Hunt,
Assn't, Sec'y of State.

Sheep Shearing Festival.—

The sheep shearing festival, of the Wisconsin Farmer's and Mecanic's Club was held at Whitewater on Wednesday, the 18th of June. The display of stock was not very large—especially of sheep and swine—but every thing on exhibition, as far as we noticed, would do credit to a State Fair. Among the bulls were some fine animals, of the Devon and Durham breeds, quite equal to any we have before seen in the State.—The number of horses was large in proportion to other stock, among which there was some fine stallions. Two spans of matched geldings attracted much attenton—and deservedly so we thought—as they were unexceptionable in form and no difference was discernable in the marks of the horses, in either team. Altogether we were impressed with the idea, that the vicinity of Whitewater, Palmyra and East Troy can turn out as much good stock as any other section of the Western country. We expected to receive the list of premiums awarded, before this number

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went to press, or we should have taken notes on the grounds. As it is, we cannot speak of any individual exhibitors, or animals. Around the shearers, the crowd was so dense, that there was but little chance to see how their work was done; but judging from the number and shape of the fleeces that were brought out—not of the poor sheep that we afterward noticed to be somewhat bloody—we should say that the shears were handled by expert hands.

Western Times—

Is the the name of a new paper from Viroqua, the county seat of Bad Ax Co. It is published by our former townsman, J. A. SOMERBY, and a good looking sheet it is. Viroqua is fast developing its resources and a paper was needed there.

Public Documents.—

We have been in receipt of numerous valuable Congressional works, by favor of Senators DUKKEE, DODGE, and SUMNER, and Honorables BILLINGHURST and WELLS of the House, for which we return our sincere thanks.

Manny's Reapers.—

We are informed by HEATH & Co., agents for MANNY & Co's reaper, at this place. that they have disposed of a large number of these machines this season. They have a few now on hand that they can ship to any part of the state on short notice.

New Merchant Tailor Establishment.—

E. B. CRAWFORD, long and well known to the gents of Madison and vicinity as a fashionable and tasty cutter, has opened a first class tailoring shop on King street, where he will be glad to see all old friends and new customers. His card will be found in another place.

Merino Sheep For Sale.—

CHARLES WHITAKER offers for sale a large number of full blood Merino Sheep—part of the Edgarton & McCarter flock, well known to all fair-going people in this State. This is a fine lot of sheep, and we hope some nice farmer or farmers will buy them and keep them in Wisconsin. For particulars, &c., see advertisement in another place.

THE NEW RIFLE.—The peculiarities of a new rifle are, that it has a moderated groove, is a foot shorter than the United States rfle, and can readily be fired ten times a minute, and from this to sixteen times by an expert hand. It is loaded at the breech, which receives the cartridge by an operation not unlike the opening of a pair of scissors, and with nearly the same facility. The small pocket pistols are calculated to throw a Minnie ball one hundred yards; a cavalry pistol, with a range of five hundred yards; a rifle suitable for infantry, with a range of a mile; and a large gun will throw a two ounce ball, or a small shell, one mile and a half. It is claimed for this new weapon that it will set on fire a house, or a ship, at a distance of nearly two miles.

A PHYSICIAN'S RESPONSIBILITIES.—Judge Minot, of Pennsylvania, has laid down the following rules of law as applicable to physicians:

"I. The medical man engages, that he possesses a reasonable degree of skill, such as is ordinarily possessed by the profession generally.

"II. He engages to exercise that skill, with care and diligence.

"III. He engages to exercise his best judgment, *but is not responsible for a mistake of judgment*. Beyond this the defendant is not responsible. The patient himself must be responsible for all else; if he desires the highest degree of skill and care, he must secure it himself.

"IV. It is a rule of law, that a medical practitioner never insures the result."

INTERNAL HEAT OF THE EARTH.—Prof. Silliman takes a decided position in favor of the theory that the center of the earth is a fused mass of mineral matter. His chief argument is the phenomenon of volcanoes, which he calls earth's chimneys and escape pipes. There are hundreds of them always in operation—hundreds are always dormant; they are all over the earth and the sea's surface, and they come from the bowels of the earth. The fiery sea in the center of the earth—says the Professor—boils over the tops of her chimneys, and when these chimneys become choked, it forces new vents, breaking out even under the sea.

E. B. CRAWFORD,
FASHIONABLE MERCHANT TAILOR,
KING ST., (Near Madison House,) MADISON, WIS.

RANDALL & JONES'
PATENT DOUBLE HAND
PLANTING MACHINES.
J. HERVA JONES, Inventor and Proprietor of the Patent for New York, Michigan, Wisconsin, Minnesota, and Northern Illinois.

OVER THIRTY First Premiums awarded—and over *Fifty Thousand Acres of Land Planted* with them in 1855! Twenty Acres of Corn have been planted by one man with one of them, in one day! I challenge any man, with any implement whatever, to a trial test—either on *time*, *quality* or *expense* of planting. I will give any person *Five Thousand Dollars* who will produce its *superior*. I have cuts and descriptions of a

NEW MARKER,

my own invention, which will *save much labor in cultivating*, and which I will mail free to all who purchase my Planters.
Rights and Machines for sale. Send for a Circular.
J. HERVA JONES.
ROCKTON, Winnebago Co. Illinois. Apr. tf.

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LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

A HOME

FOR INVALIDS AND THEIR FRIENDS,

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor E. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

Terms for board and treatment, $9 to $12 per week. Excellent stabling and carriage room is provided for those who wish to keep their own conveyance. Circulars sent on application.

Address E. A. KITTREDGE, M. D.
Lake Side Water-Cure, Madison Wis.

July 1, 1856, tf.

H. B. MERRILL & Co.,

(SUCCESSORS TO CORSS & MERRELL.)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's ware, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c,

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishmedt the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

Jy'56tf. No 8. FAIRCHILD'S BLOCK, MADISON. WIS.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. R. POWERS.

SPLENDID FARM,

FOR SALE.

A FARM embracing 100 acres of superior land, with several varieties of the best kinds of soils—about 40 acres under fence and plow, with about 10 acres of good mowing land—the balance timber and openings—lying half a mile from the city limits of Madison, and nearly three miles from the State House and Capitol Park, on Wyseora Creek.

The *Buildings* on it are convenient and comfortable—consisting of a good frame House, cellar, wood-house—a substantial frame Barn, Horse-stables, Cattle-sheds, Hen-house, a good log house, and other necessary outbuildings—with a good well, several fine springs, and a living Creek running through the whole length of the Farm, affording excellent water for stock on different parts of it, with plenty of excellent fish in it.

There is also, on the place, a large *bearing Orchard* of choice grafted Apple Trees, besides other fruit, with abundance of Strawberries, Raspberries, Currants, &c.

In short, there is no better or more pleasant farm in the country—with every convenience for an immediate comfortable *Home*, for a good family of means and stock. Possession can be had at once, or in October, as may best suit the purchaser.

The present owner is entirely suited and pleased with the place, and would be glad to keep it for a constant home; but his pecuniary circumstances will not warrant his keeping so valuable a Farm, and therefore he desires to *sell it soon*, to some one more able to own and enjoy it than himself.

The *price* is one hundred and ten dollars ($110) per acre, one third down, and the balance on time of three or four years; which is well known, by all acquainted with the place, to be very low, for one of such good improvements and advantageous location, as this farm possesses.

One half, or the whole, will be sold, as shall be desired by the purchaser. Enquiries may be made at the WISCONSIN FARMER Office.

P. S.—Horses, Cows, Tools, and the Crops on the ground, will be sold with the farm, if desired.

MADISON, July, 1856. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

any house West of New York.

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

Merino Sheep For Sale.

THE SUBSCRIBER having had devolved upon him unexpectedly, the charge of a large flock of Sheep and being inexperienced in their care and management, offers at private sale upwards of five hundred full blooded Merino Ewes and Wethers. They comprise one half of the fine flock recently owned by E. W. Edgerton and Rob't M'Carter; and the stock has taken repeated successive premiums at the State Fair. Their fleece last year sold for forty cents per pound.

These Sheep will be sold cheap and in lots to suit purchasers, and may be seen on the premises of the subscriber at Waterville, Waukesha Co., Wis.

The Cars of the M. & M. R. R. stop at Genessee and those of the M. & W. R. R. stop at Oconomowoc either station being within an hours ride of the farm.

CHAS. WHITAKER.

Waterville, June 24th 1856. jy. 2 mo.

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HASKELL, BARKER & ALDRIDGE,

MICHIGAN CITY, INDIANA,—MANUFACTURERS OF

J. J. Mann & Son's Patent

REAPER AND MOWER COMBINED,

AND SINGLE MOWER, WITH IMPROVEMENTS FOR

The Harvest of 1856.

This Machine has been thoroughly tested in all kinds of Grain and Grass, and has proved itself

THE GREATEST GRAIN AND LABOR SAVING MACHINE OF THE AGE!

We claim its superiority to all others in the following points:

1. The Admirable Arrangement of the Tongue,

Which overcomes the side-draft, so objectionable to many machines.

2. THE PATENT REVOLVING CANVASS PLATFORM,

Upon which the grain falls and is carried over the side of the machine, depositing it in the concave, from which it is thrown with the revolving rake, by the aid of a boy to regulate the size of the bundles. It will save an average of a bushel to the acre over any other mode of delivering the grain to the binder.

3. From the Simplicity of the Gearing, and Hight of the Driving Wheel, it is by far the Lightest Draft.

4. THE SICKLE GUARDS ARE SO CONSTRUCTED THAT THEY WILL NOT CLOG, AND CAN BE REPAIRED BY ANY BLACKSMITH.

5. It Cuts Equally well with Fast or Slow Motion.

6. It is Durable, and Easy to Manage.

We warrant all machines manufactured by us to be well made, of good materials, that they will mow as well as can be done with a Scythe, and will cut grain as well as it can be done with a Cradle, and

WASTE LESS GRAIN THAN ANY OTHER HARVESTER IN USE.

With regard to PREMIUMS we would say, that this Machine has in every instance where it has come in competition with other Reapers, either at Public Trials, or State Fairs, taken

First Premium, as follows:

Indiana State Fair, at Lafayette, in 1853; at the great Trial of Reapers and Mowers at Indianapolis, June 27, 1854; at the Public Trial at Laporte, Ind., July 9, 1855; at a Public Trial at Janesville, Wisconsin, July 26, 1855; at the Indiana State Fair, at Indianapolis, 1855, over

ALL THE MOST CELEBRATED REAPERS OF THE DAY,

including those of the London and Paris World's Fair notoriety.

PRICES OF MACHINES AT OUR MANUFACTORY:

Four Horse Combined Machine, Six Feet Cut,	$150.00.
Two " " " Five " "	145.00.
Reaper,	130.00.
Mower,	100.00.

One Half Cash on Delivery, balance in Six Months.

ORDERS SHOULD BE SENT IN EARLY TO SECURE MACHINES.

W. A. WEBSTER,
General Agent,

Footville, Rock Co., Wis. July, 1856. 1m.

NEW MILLINERY STORE.

NO. 4, WASHINGTON AVENUE,

MADISON, WISCONSIN.

HAVING just returned from the East with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the LADIES to my newly selected stock of

Bonnets, Ribbons, Flowers,

and general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS,

SILKS AND CASHMERES,

together with an Elegant lot of Dress Goods. Also

YANKEE NOTIONS

in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis, June, '56. tf.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,

L. A. WINCHESTER, WM. DeWOLF.

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MENDOTA NURSERY.

THE SUBSCRIBER has for Sale at his Nursery, a mile and a half west of the State University, a large variety of Apple, Pear, Cherry, Peach, Plum and Quince trees, and the best kinds of Currant bushes.

A portion of the above trees are dwarfs, and will very soon come to bearing.

The subscriber also offers for sale the most hardy and beautiful kinds of Ornamental Trees, Shrubs, Vines, Bulbs, &c., including Evergreens, Double-flowering Cherries, Mountain Ash trees, Symigas, Calycarthuses, Enonymuses, Honeysuckles, Bignonias, Prairie and other Roses —Dahlias, Gladioluses, Tulips, &c., &c.

Vegetable Plants:

Tomato, Cucumber, Melon, Cabbage, Cauliflower and Egg-plants—the most excellent varieties.

FOREST, FARM, AND GARDEN SEEDS.—I shall also keep *Locust, Osage Orange*, and the most important kinds of Nursery and Vegetable Seeds, for sale at the office of the *Wisconsin Farmer*, and I have made such arrangements with large dealers in Milwaukee, Chicago, Louisville and some of the eastern cities, that I can fill orders for *all kinds of Seed*, of the best quality, at short notice, and at the lowest rates. Many kinds of seed can be sent by mail without much extra expense. Any one sending 12 postage stamps will have a 2 ounce package of Locust Seed forwarded to him.

ORDERS left at the *Farmer* Office, or sent by mail, will receive prompt attention. H. F. BOND.

MADISON, WIS., Feb., 1856. t.f.

UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms.—Begin:

1.—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.

COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,			$4,00
ROOM RENT,	do	do.	3,00
WOOD, (winter terms,)		do. (maximum.)	7,00
BOARD, IN HALL,	do	do	25,00
WASHING,	do	do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "

Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Riveted Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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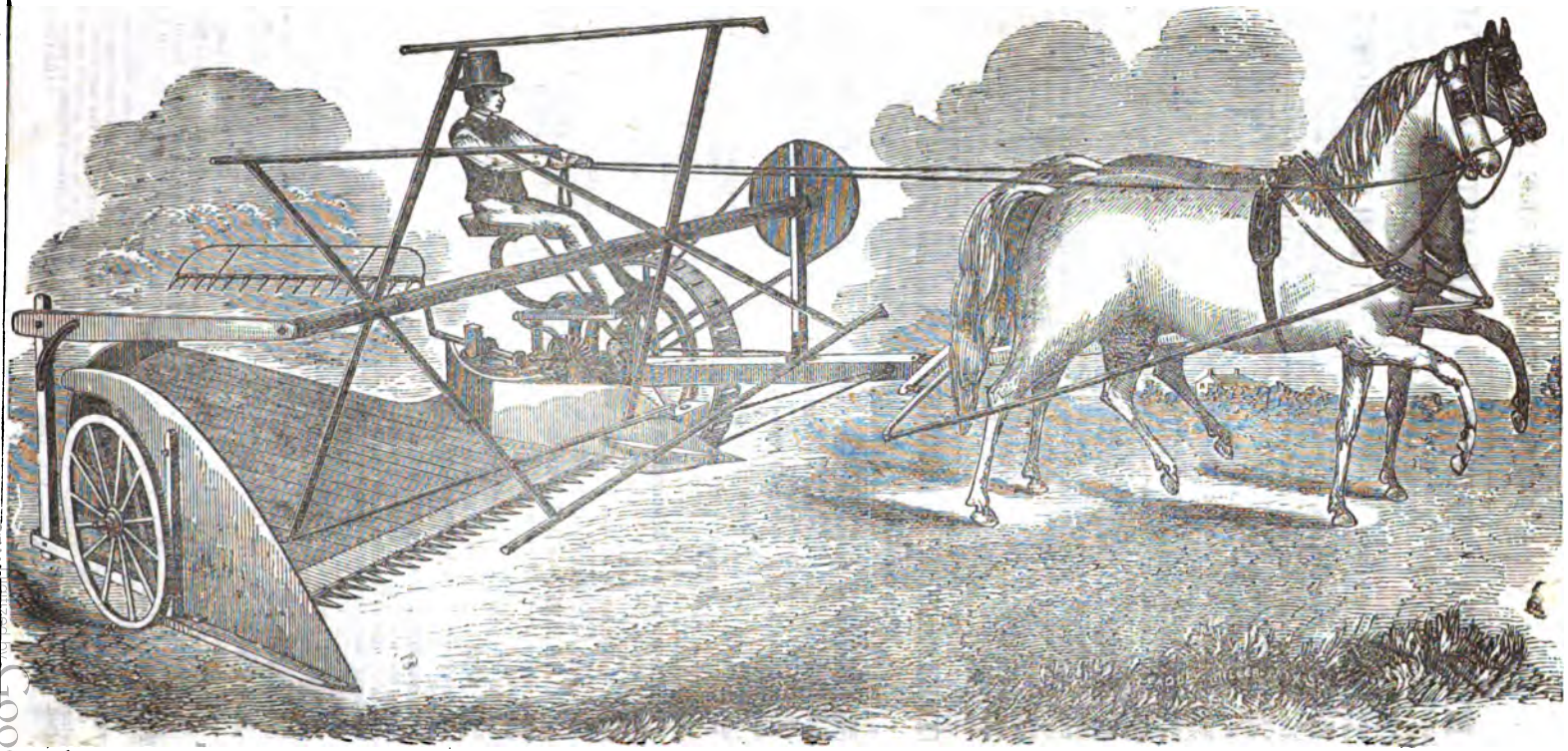
SEYMOUR & MORGAN'S

PATENT IMPROVED NEW YORK SELF-RAKING



REAPER—WITH MOWER ATTACHMENT.

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SEYMOUR & MORGAN'S
PATENT IMPROVED NEW YORK
SELF-RAKING REAPER,
WITH MOWER ATTACHED!

ALL who have used a Reaper know something of the labor and skill requisite to rake off the grain in *good* bundles, and a *Self Raking Reaper* which should be simple in its construction, and durable, performing the work as well as the best hand-Raking machine, has been considered as a great desideratum, by all intelligent farmers. Such a machine is now offered to the farmers, and warranted to *cut* and *lay off* in *good* bundles from ten to twenty acres per day, with *one* man and a good team. The rake is *not* liable to get out of order, (like those of some other machines offered to the public), but is as durable as any part of *this* or any *other* Reaper. Among the important points of superiority in this machine may be mentioned—lightness of draught for teams, absence of side pressure, and width of cut 6½ ft. Made in New York of the best of eastern timber, it cannot fail to give satisfaction.

N. B.—Wet grain, grass or weeds form no impediment to the perfect working of the rake.

Price, delivered in Madison, $160,—$60, paid on delivering Reaper, and note given for $100, and interest due 1st Dec., 1856, which can be taken up for $95, if desired, after a fair trial in the harvest field.

Orders may be left at Fox's Hardware store, near the Court House. For circulars, descriptions, &c., apply to

apr-tf S. L. SHELDON, Madison, Wis.

Madison Agricultural
WAREHOUSE.
OF
SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constansly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS, Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his
HAYING AND HARVESTING TOOLS
may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
apr-tf At sign of Pad Lock, Morris Street.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS & STATIONERY,
BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY
CONNECTED WITH THIS ESTABLISHMENT.

Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date, ... $1,874,284 00
Total amount of Premium Notes received, ... 21,500 00
do do Cash Premiums received, ... 11,454 00
do number of Policies issued, ... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and expenses paid to date, 9,871 40

Balance in favor of the Company Jan. 1, '56, . $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to Farmers and others wishing Insurance, a safe and reliable Company in which to insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:
B. F. HOPKINS, *Sec'y.* N. W. DEAN. *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS. *V. Pres.*

Directors:
L. J. FARWELL, N. W. DEAN, SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

Jan. tf. C. C. OLIN, General Agent.

Madison Steam Planing Mill,
AND
SASH, DOOR AND BLIND
MANUFACTORY,
CORNER OF WILSON & LIVINGSTON STREETS,
NORTHEAST SIDE OF TOWN, NEAR THE
GAS WORKS—MADISON, WIS.

MADISON STEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6 ▸ 6. 6. to 2.10 ▸ 7ft., 1¼ & 1⅜ ⅜in. thick, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great ecomomy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.

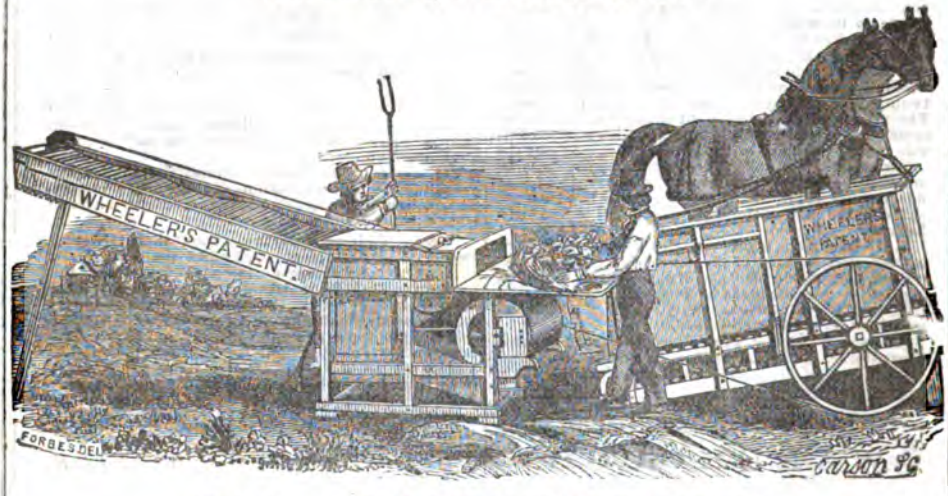
MADISON, Wis., June, '56. tf.

Google

NEW YORK STATE AGRICULTURAL WORKS,

BY

WHEELER, MELICK & CO.



[*Double Power, and Combined Thresher and Winnower, in operation.*]

We are Manufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of Wheat or twice as many Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Overshot Thresher with Vibrating Separator.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price $160.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Combined Thresher and Winnower.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of Wheat and 300 bushels of Oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine. **Price $245.**

Also Clover Hullers, Feed Cutters, and Sawing Machines.

Our Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines, that admit of being driven by Horse Power, and our Threshers may be driven by any of the ordinary kinds of Horse Powers in use—either are sold separately.

☞ To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery 22 years, and have had longer, larger and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

☞ Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by the cheapest and best routes.

WHEELER, MELICK & CO.
Albany, N. Y.

MAY 1, tf. 1856.

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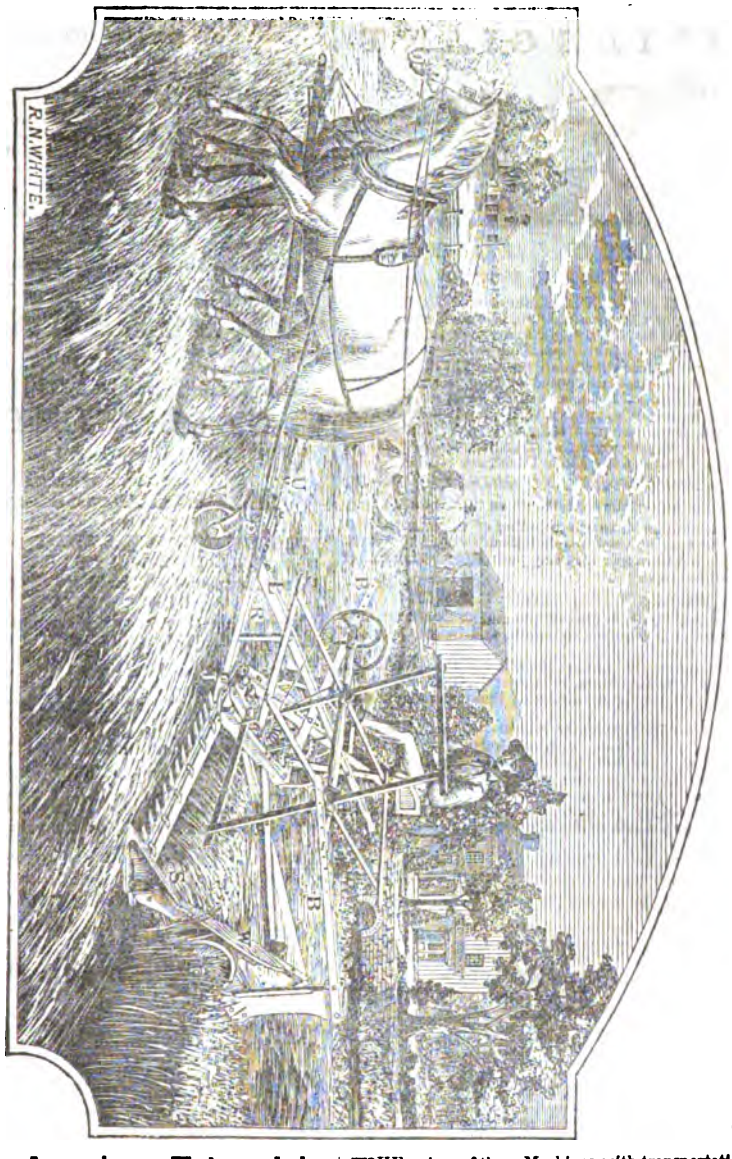

"MANNY'S REAPER AND MOWER COMBINED—AS MOWING."

Great American Triumph!

MANNY'S CELEBRATED REAPER & MOWER VICTORIOUS!—RECEIVING THE

GRAND SILVER FIRST CLASS MEDAL

AT THE

PARIS WORLD'S FAIR.

10,000

Of Manny's Machines made and used in the United States during the past three years!

One Hundred and Twenty-eight Premiums awarded Manny's Reaper & Mower since 1852!

MANNY & CO.—ROCKFORD, ILL.,

Manufacturers of J. H. Manny's Patent

ADJUSTABLE REAPER & MOWER COMBINED, AND SINGLE MOWER.

THE prices of these Machines, with transportation and ded, are:—For Two Horse Reaper & Mower Combined, of about five feet cut, - - - - - - - - - $185

For Four Horse Reaper & Mower Combined, of about six feet cut, - - - - - - - - - - - - $145

For Single Mowing Machine, of about 5 feet cut - $120

Descriptive Phamphlets, containing full description of the machine, and much interesting information, sent *gratis* to all who apply for them.

☞ HEATH & Co., Madison, Agents—Office at Heath & Co.'s Express, Wilson St., below Lake House.

MANNY & CO.

Feb. 1, 1856. 5m. alt.

BOOK AND JOB PRINTING,

Of all kinds neatly and promptly executed, at low prices

AT THE WISCONSIN FARMER OFFICE.

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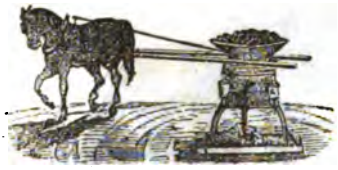
IMPROVED LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 23d of February last. A Committee composed of Gov. WRIGHT; Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill. It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

Price—No. 2 Complete, $45,00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $53.00, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses. Price, $65.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

All Communications promptly Attended to.

WOOL! WOOL!

100,000 POUNDS OF WOOL WANTED at the FARMER'S FACTORY in Beaver Dam, Wis., to manufacture into Cassimers, Satinetts, Tweeds, all wool Flannels, or cotton warp Flannels two yards wide for sheets, plain or twilled, or in exchange for

CASH AND CLOTHS.

We have now more than 6,000 yards of the above Cloths on hand, besides nearly 1,000 superior all wool Horse Blankets. We wish to say that three years ago we arrived in Wisconsin, with machinery to make Woolen Cloths. We were determined to make only *pure Wool hard twisted, serviceable* Goods for the wool grower, at less cost to him than the poor stuff brought from the East, made of little wool, much old rags, flax and cotton, (the latter being the best part.)

As to our success, we have only to refer to those who have patronized us, and the unprecedented increased demand for our goods; so that we have greatly enlarged our capacity to manufacture cloths. Our Factory is now the largest in this State, and we are now making more than 1,000 yards per week. We have three Carding Machines for

CARDING ROLLS,

and can do that work in short notice. Custom Cloth Dressed at all seasons of the year.

We always return the same quality of cloth as the wool sent. All letters of inquiry as to the particulars will be promptly answered. Wool may be sent to us by Railroad, and Cloth will be returned in the same manner if required.

G. H. STEWART & CO.

BEAVER DAM, Wis., June, 2m.

CLOTHING.

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings—a Beautiful Assortment.

GENTS. CRAVATS

and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, MADISON. June, 1856. tf.

J. S. FILLMORE,

LAND, REAL ESTATE,

—AND—

COLLECTION AGENCY.

No. 2 Juneau Block, Milwaukee, Wis.

Mortgages Bought, Loans Negotiated, Real Estate sold at reasonable rates, Collections and Remittances

ATTENDED TO PROMPTLY.

FARMING LANDS

FOR SALE!

THE following valuable Tracts of Land, situated in the County of DANE, are offered for sale. Title indisputable, to wit

Description,	*Section,*	*Town,*	*Range,*	*Acres,*
S E qr of S W qr,	20	8	12	40
S W qr of S E qr	20	8	12	40
E hf of S E qr	31	9	12	80
S W qr of S E qr	31	9	12	40
N W qr of N E qr	6	8	12	40

Ozaukee County—W ½ of the W ½ of S W ¼ Section 4, Town 10, Range 22.

The above tracts comprise some of the best lands in those counties for farming purposes. For terms apply to

JOHN S. FILLMORE.

ALSO

A VALUABLE FARM

In the town of Granville, seven miles from Milwaukee near the Lisbon Plank Road, containing 80 acres of land, twenty acres of Timber, with a good Frame House, and one of the best Barns in the country. 100 Fruit Trees, a Good Well and Cistern. The land is of superior quality, and under a high state of cultivation: in fact, there is everything about it to make a home comfortable.

Price—$4,500, Apply to

JOHN S. FILLMORE.

MILWAUKEE, June, 1856.

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AUGUST, 1856.

Google

POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

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TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with January and July.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**

MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

Janesville

AGRICULTURAL WAREHOUSE

—AND—

SEED STORE.

ELDRED BARROWS & CO.,

Wholesale and Retail Dealers,

HAVING opened an extensive establishment for the sale of Agricultural Tools, Farming Machinery and all kinds of Seeds—would respectfully call the attention of the Farmers of Rock and adjoining Counties to their Stock, comprising the *latest and best improvements*, purchased with care, direct from the most approved manufacturers.

We would invite a particular examination of our stock of Steel Plows—consisting of the Massachusetts, Chicago, Moline, Wisconsin, and other patterns. We have also a large stock of Horticultural Implements, from late importations.

Seed Department.

We shall give *especial attention* to this Department, and shall at all times keep a full supply of the choicest *Field, Garden and Flower Seeds* in their *season*, selected and put up *expressly for our own sales*, all of which will be sold *cheap for cash*.

AGENTS—for Eastern Manufacturers—Pitkin's Osage Orange Seed for Hedges, (with directions for raising)—and for the "Wisconsin Farmer."

CASH PAID FOR CLOVER AND GRASS SEED.

P. S.—To those dealers who purchase West of the Lakes, we offer every inducement to buy of us, as we can furnish all articles in our line at the lowest possible prices.

Corner of Milwaukee and River Streets, west side of the river.

JANESVILLE, Aug., 1856. tf.

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1865, Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., AUGUST, 1856. NO. 8.

SUGGESTIONS FOR AUGUST.

See! an increasing brightness, broad and fleet,
Breaks on the morning in a rosy flood,
As if He smiled to see His work complete,
And rested from it, and pronounced it good.
The sands lie still, and every wind is furled:
The Sun comes up, and looks upon the world.
Is there no burst of music to proclaim
The pomp and majesty of this new lord?—
A golden trumpet in a beam of flame,
Startling the universe with grand accord?
Must Earth be dumb beneath the splendors thrown
From his full orb to glorify her own?

Bayard Taylor.

August is pre-eminintly the harvest month, up in this northern climate, and especially this backward season. Therefore, much we said last month on this subject will now be in point. We see that new wheat appeared in the Chicago market on the 20th of June, from southern Illinois. That seems early to us northerners, especially as the railroad makes the distance between southern Wisconsin and southern Illinois seem so short.

The prompt and timely gathering of the wheat crop, when at just the right stage of ripeness and maturity, is a matter of the first importance, both as to quantity and quality. We repeat, that great pains should be taken to cut oats early, and to cure them well, with reference to the straw for hay. This will be the more important in many neighborhoods this season, on account of the dry weather, and short growth of grass. Grass bids fair to be a light crop in some neighborhoods, and hence the more important to cut it close, and save it carefully. Much depends on the manner in which hay is cut and saved, as to its value. Hay that is bleached too long in the sun and rain, is as much inferior to that which is cured bright and well, as tea grounds are to bright green tea. Half a ton of well cured hay, is worth more than a whole ton indifferently saved. We know we are repeating something said before on the same subject; but we do it because we deem it of such high importance.

Keep a sharp eye to the weeds and thistles, that they don't go to seed. Attend also to the fruit trees, especially those recently set; keep the mulching carefully round them, and if very dry, water them occasionally; it is better than to lose them by drought. Budding many varieties of fruit trees, can be done as well or better this month than the last. See our remarks on this subject under our horticultural head.

August is the month in which to plant a strawberry bed; and where is the farmer, or farmer's wife, that will not have one? Nothing is easier or more desirable. Full instructions will be found in this number, for selecting varieties, and cultivating them properly.

We advise all who have a rod or an acre of ground that can be spared for the purpose, to set about it this very season; and if properly attended to, probably a fine crop may be gathered next June. We set a bed the last of April of the present year, and are getting a nice little crop from it, even the first season, and within 60 days of planting. Surely, this is not long to wait—who will not try it? Perhaps our zeal just now is a little more urgent on the subject, for the reason that we are, at the time of this writing, in the midst of a strawberry harvest, (in Cleveland, Ohio,) where they are exhibited every morning in the market, by the cart-load, and where they are on the tea-table every evening—such big ones, too, and in such abundance as to make a down right feast, instead of a dainty taste. When will the tea-tables of Wisconsin be so blessed? We answer, next year, if our readers will heed our advice; for we say, in conclusion, that it is just as easy to raise strawberries, in abundance, as potatoes. Let us again enjoin all who have any nicety about them to try it. Such as have the good fortune to raise more than they can eat, sell, or give away, will find it a good plan to put them up in air tight cans, or jars, for after use. If done well, they will come out as fresh and fine next winter as when first picked.

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This mode of putting up the products of the orchard and garden, is one of the great inventions of the day, and is destined to have a rapidly increasing importance from year to year. The process will be found fully described on another page, and is well worth the study and practice of every lover of good eating.

Look well to cattle and sheep, and all other animals, during the hot weather; see that they have plenty of salt, and above all, a plenty of water. Think how often you raise the cup to your own lips, and drink the cooling draught; and as often as you do that, remember the poor teams that labor in your fields, perhaps drawing the loads, while you ride on an easy seat. Water all working teams at least four times a day, in hot weather; for anything less is generally inhuman, as well as unprofitable.

Then the other creatures—give them free access to ample water, if possible. Even if you have to pump it up, don't be niggardly, or think the creatures drink more than they need; they are the best judges. We think every man who has a considerable stock to pump for, should have a wind-mill to do it for him. The WESTERN WINDMILL Co., at Chicago, offer them cheap, and warrant them perfectly durable and satisfactory, or no pay. We purpose to try one, as soon as we can attend to having it put up. Their advertisement will be found in this number. Farmers who are tired of pumping by hand, read it; and if you should think the mill a good thing, try it. We are expecting to see it effect an important revolution in farm economy, both by raising water, grinding coarse grain, and may be super-fine flour, upon many a prairie eminence, that seems to have been made on purpose for such mills.

Pare back the hoofs of your sheep, if you would prevent their being lame; and if you would keep off the foot rot, don't let them run too much upon low wet land. But if they do get the rot, an application of finely powdered blue vitriol, to the blistered parts between the hoofs, and a dry pasture, will soon cure them. Then, again, don't omit to place tar about in their salt troughs. It will keep off the fly, and prevent the maggot in the head.

A little timely precaution will prevent almost all difficulties, and diseases, with sheep. Whereas neglect and carelessness often involve destruction, if well attended to, they are the prettiest form stock in the world, but neglected, they are the worst.

A TRIP THROUGH THE NORTHWESTERN Counties of WISCONSIN—With its Incidents and Novelties.

(CONTINUED FROM PAGE 307.)

From Chippewa Falls we took a northwesterly course, through a fine, opening and prairie country, about 40 miles to Menomonee, or Wilson's Mills, as it is more frequently called. Here is an extensive lumbering establishment, situated on the Menomonee River, with a fine water power, ample, to all appearance, for any amount of business. Acres of the finest kind of pine logs float in their pond, and the mill itself is a perfect *cruncher*; having two powerful gangs, besides numbers of single and circular saws, cutting regularly from 60,000 to 80,000 feet of lumber per day.

Adjoining the mill is a large rafting house, fitted for working night and day, so that the business progresses without interruption—turning off an incredible amount of lumber. The whole concern employs over 200 men in all its various operations. These, with their families and appendages, serve to make up quite a village at Menomonee, which place, on the whole, appeared decidedly neat and tidy—reminding us forcibly of an eastern factory corporation. With this difference, however, that when the bell rung an army, not of red-coated, but of red-shirted men rushed out to their meals, instead of a crowd of well dressed, tidy and sprightly girls.

This mill company are reported to be excellent managers, and are understood to be making a great deal of money. They are about building a flouring mill, and already have a store furnished and filled with a stock of goods, that would do credit to any city in the West.

Menomonee will soon be a pretty, thriving town; especially as it is in the hands of men who have come up from the *ranks*, and therefore understand every rope of the ship. Among other things not to be forgotten, we found here a comfortable Inn, with a nice attentive eastern Yankee for a landlord. Worn out, dirty, starved, and sunburnt as we were, it was a luxury to be appreciated and long remembered. A ray of sunshine, amid

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clouds and storms. The neat, clean table, presided over by the fair lady-like daughter of the host, afforded an agreeable contrast to the masculine hovels, and half-breed hotels too frequently met with.

But the pleasant periods pass away the most rapidly; and so with our stay at Menomonee. West of us, towards Hudson, our point of destination, lay a dense unsettled forest, 30 miles across. Owing to a broken buggy and the terrible condition of the roads, we had no alternative but to take *Foot's Express!* The time was, in our earlier pioneering in the West, that this would have been a luxury; but now we are inclined to regard it rather as a labor. However, seven o'clock A. M. found us on the road. On either hand, and interminably, grew the stately timber—oak, elm, bass, birch, maple, &c. Eight miles in, there was quite a little sprinkling of tall, handsome pine. Here was a single shanty, and a couple of large fellows firing at a mark, but no *sign* of woman about their cabin. A single dress, or baby's frock hanging on a bush, would have given to the wild scene a social appearance.

We did not even stop for a moment's rest, but passed on to Holman's, as it is called, twelve miles further, on the Eaugalle. Here we hoped to find a resting place and a comfortable dinner. Noon brought us to the door of their cabin, faint and weary. Alas, for human hopes! the landlady was a lusty *native*—decidedly brown, but not more so than the cabin; and, what was worse, they had nothing to eat at that.

Twenty miles already, over a rough and muddy road, and under a blazing hot sun, to which we must now add nine more before dinner, was rather dubious at best. But the only remedy was to push on. We did so, and about two o'clock found us at Baker's Station, a little tavern on the prairie, the other side of the woods, where the active and obliging landlady soon supplied our needs. We hope that the next time we walk through those woods it will be upon the iron rail, and at the rate of 30 miles an hour—a thing we confidently expect to do before 1860. The shriek of the locomotive will soon supercede the howl of the wolf, and under its influence this black forest will open to the sun, and blossom like the rose. God speed the day!

From the forest to Hudson, some 25 miles, the country is mostly a fine rolling prairie, interspersed with occasional timber, and all rapidly settling. Here, as well as further back on the road, the whole region of country is beautifully and amply watered.

Hudson, on the St. Croix, is backed up by this fine country, and is the county town of St. Croix county, besides being the locality of the U. S. Land Office, in the Willow River District. It is a smart, thriving town, of some 2,000 inhabitants. It has good landings on the river, and boats are constantly coming and going. If she succeeds as she intends, in securing the forks of the new land grant railway, she will soon be a made up city. But railroads, like the issues of elections, are "mighty uncertain." Property seems to be advancing rapidly, and real estate operators are keen for speculation. All in all, it is decidedly a smart river town, and evidently in the hands of thorough-going business men.

After a four days' waiting for our turn to enter Government lands, and having accomplished it all satisfactorily, we dropped down the St. Croix to Prescott. This is another of the fine towns, situated at the junction of the St. Croix and Mississippi, and with one of the finest tables of land on which to build a town, that can be found on either of the rivers. About 25 feet above the level of the streams it runs back as fine and far as could be wished.

This town is already well under way, and has a business-like appearance. Its enterprising proprietor, Dr. Maxon, is an old Legislative friend of ours, and an hour's chat with him was time agreeably spent. Here, too, they are purposing to secure the junction and crossing of the new railroad, and for aught we can see, their prospect is an equal one at least with any other point.

About 25 miles up the Mississippi takes us to St. Paul, which all the world knows is a great town, and just at the present, the northwestern focus of activity trade and speculation. We will not spend time in particularizing about a town, so universally known and written about. St. Anthony and Minneapolis are also charming in their way, and the latter place is decidedly romantic.

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When the railroad from St. Paul to Lake Superior is built, we will venture the opinion that the circuit of the Upper Mississippi and Lake Superior, will at once become one of the most popular pleasure routes, for summer, in America. It will unite the most delightful alternations of climate, with every conceivable variety of scenery, and embrace, withal, every kind of sporting and excitement that can be desired. We predict for it erelong, a popularity that Saratoga, or Newport, never dreamed of—a popularity that will call its 100,000 per annum to its cool and varied resorts, from every part of the continent.

Steamboat traveling on the Mississippi is, on the whole, a pleasant business—especially if you have the fortune to get into good boats. The regular lines of Dunleith and Dubuque boats are all good, and some of them even fine. They are quite roomy and neat, and the table is usually A No. 1—well supplied with everything that could reasonably be desired, and served up, too, by those clean, white-aproned boys, in a style of taste and neatness that the girls would find it hard to beat.

These boats contain among their passengers and freight, everything that could be imagined. A perfect ark, with all sorts of *humans*, cattle, and creepieg things, with every kind of farm and household trap, and implement, that enters into human economy or necessity. The constant landings and leavings at every little town, the rugged and ever changing scenery of islands and mountains, of passing boats and floating rafts, seems to keep up a pleasant but ever varying excitement, that must be witnessed to be fully understood. To those who would spend a pleasant week, and any surplus money, we would say, go up the river to St. Paul, St. Anthony and Minneapolis; and when you get tired of it, come down again. We will warrant it to give satisfaction in all cases.

And especially do we recommend it as a Bridal Tour for newly married people; we doubt not it will be found to be just the thing. If the reader has not ere this got wearied, we will now excuse him. D. J. P.

A Defense against Mad Dogs.—Hoop dresses are said to be an excellent defense against mad dogs, and should therefore be universally worn during "dog days." (?)

THE FOREST TREES OF WISCONSIN,

BY I. A. LAPHAM.

No. 34.—*Fagus ferruginea*, Aiton—Beech. Like many other species of plant, the American Beech tree has been supposed to be only a variety of the European kind; but later botanists have decided that the two are distinct. Michaux describes two varieties, and makes them different species—the white and the red. The first is nearly all sap-wood, which is white; the last nearly all heart-wood, which is red. But these peculiarities are found to be owing to something in the soil or exposure; there being no sufficient botanical differences to enable us to distinguish the two kinds as separate species.

The Oaks, with which this series of articles on our native forest trees was commenced, and the Beech, belong to the first division of the cup-bearing Family (*cupuliferæ*,) in which the fruit is scattered, a few in a cluster. The *carpinus* and *ostrya* constitute another division of the same family, having the fruit arranged in long clusters, something like the hop.

In our State the Beech is confined to certain districts along the shores of Lake Michigan, where it is often found constituting almost the entire forest. I am not informed in regard to the occurrence of this tree in the northern part of the State.

In the spring the young Beech trees, and the lower branches of the older ones, are covered with dead leaves of the last year's growth. These old leaves remain until they are crowded off by the young foliage of another year. The tops of the larger trees are usually bare of dead leaves.

In the books we may read the following directions for the cultivation of the Beech from the seed, that being the mode usually adopted: "Shake the nuts from the tree as they ripen, dry them in the sun, or in an airy shed or loft, after which they may be mixed with sand that is perfectly dry, at the rate of three bushels of sand to one of mast, which only retains its vital properties for one year. Sow the seed one inch apart, in March, in a light rich soil, and cover them about one inch; the tender young plants will appear in May, when, if the season is dry, they should be moderately watered. In March, the next season, with a spade made very sharp for the purpose, undermine the

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roots and cut them between four and five inches under the ground. After the plants have stood for two years, or, if in poor soil, three years, they may be transplanted, and in three or four years removed to general plantation."

Between Ghent and Antwerp, in Belgium, there were formerly if not now, very solid and elegant hedges, made of the Beech; and while we are seeking for the best hedge plant, it might be well for some person, or some agricultural society, to try what can be done with the American Beech. The young trees are placed eight inches apart, and bent in opposite directions, so as to cross each other with small apertures. They are bound together at the points of intersection, where they soon grow together. After the young plants are well established they bear the knife well, and do not sprout up from the roots as vigorously as other trees. In exposed situations on the prairies, barriers of this kind should be formed along the north and north-west borders of gardens, building-lots, barn-yards, &c., For such purpose the Beech will answer better than any other tree, excepting the evergreens.

The wood of the Beech is applied to many useful purposes, and would be much more used, were it not for the abundance of other kinds afforded by the forests of our country.

As an ornamental tree, the Beech is no great favorite, though, in its young state especially, it is a handsome tree. For its density of shade, the clean and neat appearance of its bark, its bright shining leaves, its slender and elegant branches, this tree is certainly worthy of the attention of the landscape gardener. We are too apt to judge of the characteristics of a tree from its appearance in the dense forests, where it has no room to spread, rather than when growing in an open space, where it could display all its beauty.

There are two varieties of the European Beech well worthy of cultivation in Wisconsin. They are known as the Purple Beech, and the Weeping Beech.

No 35.—*Carpinus Americana*, of Michaux —Hornbeam. This is a small tree, found abundantly almost everywhere in the American forests. It has several names by which it is known in different parts of the country —among them are Hornbeam, Hophornbeam, Iron-wood, Blue Beech, Water or Swamp Beech, &c., &c. Some of these names are also applied to the next species. The bark has some resemblance to that of the Beech tree in its color and smoothness. The Hornbeam prefers rich damp soils, near swamps, on river bottoms, &c.

Professor Emmons, in his report on the Trees and Shrubs of Massachusetts, a work of great interest and value, says of this small tree, that "it is of slow growth, and is supposed to live to a great age. The wood is white, close-grained and compact, and has great strength. It is used for beetles, levers, and for other purposes where strength and solidity are required; and it is well fitted for the turner. The corresponding species in Europe is much esteemed as fuel, and in France its charcoal is preferred to most others. The Hornbeam is a tree of considerable beauty. Its smooth, fluted trunk is an interesting object to one curious in forest history; its foliage is remarkable for its softness, and the fruit is unlike that of any other tree. The crimson, scarlet and orange of its autumnal colors, mingling into a rich purplish red as seen at a distance, makes it rank in splendor almost with the Tupelo and the Scarlet Oak. It is easily cultivated and should have a corner in every collection of trees."

One of the European Species, (*C. betulus*, Linn.,) is well adapted by its mode of growth for garden hedges.

No. 36.—*Ostrya Virginica*, of Willdenow —Iron-wood. Like the last, this small tree has received different names, and by some the name of Iron-wood is applied to both; though no two trees could well be more distinct. They may be known at once by the bark, which in the Hornbeam is smooth and gray like the Beech, but in the Iron-wood is brown and rough, being much furrowed and loosened. But they may be still more readily distinguished by the fruit. The Hornbeam has a naked nut concealed in the axil of a leefy scale or bract; while the Iron-wood has the nut covered by a kind of bladder-like hairy sack.

The wood of both is very hard, strong and rigid, answering well for handspikes and other purposes where strength is required—thus giving propriety to the name of *Iron-wood*. But for the sake of distinction, it is

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proper to confine this name to the species now under consideration.

The tree soon dies when the surrounding forest trees are cleared away leaving the Iron-wood alone. Hence it has no value for ornamental purposes.

LIVING IN THE COUNTRY.

It is a good thing to live in the country. To escape from the prison walls of the metropolis—the great brickery we call "the city"—and live amid blossoms and leaves, in shadow and sunshine, in moonlight and starlight, in rain, mist, dew, hoar-frost, and drouth, out in the open campaign, and under the blue dome that is bounded by the horizon only. It is a good thing to have a well with dripping buckets, a porch with honey buds, and sweet bells, a hive embroidered with nimble bees, a sun-dial mossed over, ivy up to the eaves, curtains of dimity, a tumbler of fresh flowers in your bed-room, a rooster on the roof, and a dog upon the piazza.

When Mrs. Sparrowgrass and I moved into the country with our heads full of fresh butter and cool crisp radishes for tea; with ideas entirely lucid respecting milk, and a looseness of calculation respecting the number in family it would take a good laying hen to supply with fresh eggs every morning—when Mrs. Sparrowgrass and I moved into the country we found some preconceived notions had to be abandoned, and some departures made from the plan we had laid down in the little back parlor in Avenue G.

One of the first achievements in the country is early rising! with the lark—with the sun—while the dew is on the grass, "under the opening eyelids of the morn," and so forth. Early rising! What can be done with five or six o'clock in town? What may not be done at those hours in the country? With the hoe, the rake, the dibble, the spade, the watering-pot? To plant, prune, drill, transplant, graft, train and sprinkle! Mrs. S. and I agreed to rise early in the country.

"Richard and Robin were two pretty men,
They laid in the bed till the clock struck ten:
Up jumped Richard and looked at the sky;
O, brother Robin! the sun's VERY high!"

Early rising in the country is not an instinct: it is a sentiment and must be cultivated.

A friend recommended to me to send to the south side of Long Island for some very prolific potatoes—the real hippopotamus breed. Down went my man, and what with expense of horse-hire, tavern bills, toll gates, and breaking a wagon, the hippopotami cost as much apiece as pine-apples. They were fine potatoes though, with comely features, and large languishing eyes that promised increase of family without delay. As I worked my own garden (for which I hired a landscape gardener at two dollars per day to give me instructions,) I concluded that the object of my first experiment in early rising should be the planting of the hippopotamuses. I accordingly rose next day at five, and it rained. The next and it rained! It rained for two weeks! We had splendid potatoes every day for dinner.

"My dear," said I to Mrs. Sparrowgrass, "where did you get those fine potatoes?"

"Why," said she, innocently, "out of that basket from Long Island!"

The last of the hippopotamuses were before me, pealed, and boiled, and mashed and baked, with a nice thin brown crust on the top.

I was more successful afterwards. I did get some seed potatoes in the ground. But something was the matter; at the end of the season I did not get as many potatoes as I had put in.

Mrs. Sparrowgrass, who is a notable housewife, said to me one day, "Now, my dear, we shall soon have plenty of eggs, for I have been buying a lot of chickens." There they were, each with about as many feathers as a grasshopper, and a chirp not louder. Of course we looked forward with pleasant hopes to the period when the first cackle should announce the milk white eggs, warmly deposited in the hay, which we had provided bountifully. They grew finely, and one day I ventured to remark that our hens had remarkably large combs, to which Mrs. S. replied:

"Yes, indeed, I have been observing that; but if you will venture to have a real treat, you should get up early in the morning and hear them crow!"

"Crow!" said I faintly, "our hens crowing! Then by 'the cock that crowed in the morn, to wake the priest all shaven and shorn,' we might as well give up all hopes of having any eggs," said I, "for as sure as you live, Mrs. S., our hens are all roosters! that grew up and fought with the neighbor's chickens, until there was not a whole pair of eyes on either side of the fence.

A dog is a good thing to have in the country. I have one which I raised from a pup. He is a good stout fellow, and a hearty barker and feeder. The man of whom I bought him said he was a thorough-bred, but he begins to have a mongrel look about him. He is a good watch dog, though, for the moment he sees any suspicious looking person about the premises, he comes right into the kitchen and gets behind the stove. First we kept him in the house, and he scratched all night to get out. Then we turned him out, and he scratched all night to get in. Then we tied him up at the back of the garden, and he howled so that our neighbor shot at him

twice before day break. Finally, we gave him away, and he came back; and now he is just recovering from a fit in which he has torn up the patch that has been sown for our spring radishes.

A good strong gate is a necessary article for our grrden. A good, strong, heavy gate, with a dislocated hinge, so that it will neither open nor shut. Such an one have I. The grounds before my fence are in common, and all the neighbors' cows pasture there. I remarked to Mrs. S., as we stood at the window in a June sunset, how placid and picturesque the cattle looked, as they strolled about, cropping the green herbage. Next morning, I found the innocent creatures in my garden. They had not left a green thing in it. The corn in the milk, the beans on the poles, the young cabbages, the tender lettuce, even the thriving shoots on my fruit trees had vanished. And there they were looking quietly on the ruin they had made. Our watch dog, too, was for gathering with them. It was too much, so I got a large stick and drove them all out, except a young heifer, which I chased all over the flower beds, breaking down my trellises, my woodbines and sweet briars, my roses and petunias, until I cornered her in the hot-bed. I had to call for assistance to extricate her from the sashes, and her owner has sued me for damages. I believe I shall move in town. [Sparrowgrass Papers.

MARQUETTE, ADAMS, WAUSHARA AND PORTAGE COUNTIES.

From a business letter, dated Beaver Dam, July 6th, we make the following extracts. If our correspondent will take the trouble to note down and communicate his impressions of different localities through which he may pass this fall, we doubt not they will be as interesting to the readers of the FARMER as they will be reliable; for he is a discriminating, practical observer. It is unnecessary to add that all well wishers of the FARMER have our sincere thanks—and that workers, like friend G., are the back-bone—the real supporters of all improvements:

* * * "I left home June 25th, and traveled through Marquette, Adams, Waushara and Portage counties. I saw along my route visible marks of the ravages of the past hard winter upon the young orchards; but the spring crops had a healthy and vigorous appearance, and bid fair to yield a large profit to the farmer for the labor bestowed. I found also a great want of the circulation of the FARMER, and found some co-laborers who understood the benefits to be derived from its circulation, and promised to put their shoulder to the wheel and procure subscribers.

"The counties through which I passed are rapidly settling up with enterprising and go-ahead kind of inhabitants, from New York and New England. The soil is composed of a yellow sandy loam, and is well adapted to the propagation of most kinds of fruit trees, and especially apple—the great staple fruit of our State. I shall take a trip during the coming fall, through the same counties, and also visit other portions of the State. I will see what can be done in the way of giving the FARMER a circulation approximate to what its merits demand."

"Yours truly, J. G."

For the Farmer.

WHEAT AND CHESS.

EDITORS FARMER:—I read the communication of Mr. Hatch in the April number of your paper, in relation to the transmutation of wheat into chess, with much interest, and hoped in your next number to get some practical information on the subject. But, alas, in the June number, page, 257, I find the communination of Mr. D. Worthington, and, to use his own quotation, I felt like the prophet, (and *I* was sorely *vexed*.) Perhaps I may not be able to throw any light on this subject of wheat turning to chess; but will offer my proofs, and hope that practical and observing farmers will cast in their mite. It is time this subject was settled—there has been enough *theory*—now let us have FACTS. First, I will say to Mr. Worthingtom to take his Bible and turn to first Corinthians, 15th chapter, 36th and 37th verses, and he may find the proofs he asks for in Holy Writ, which reads as follows: "And that which thou sowest thou sowest not that body that shall be, but bare grain. It may chance of wheat or some other grain." Now if any one will take the trouble to sprout wheat, and dry it thoroughly, then sprout it as before, then dry, which may be repeated three times—some have said four or five times—and afterward sow it, the product will be chess. The best method to sprout the wheat is to wrap it in several folds of cloth, and keep it wet. I will go so far as to say that chess and timothy grass are both produced

from wheat—and I will not dispute that fox-tail grass, which the gentleman alludes to, may be also. But for the proofs. I will here ask, why do we not find chess as plentifully as in winter wheat? My answer is, it does not kill out by the roots being broken off by the up-heaving of the ground by frost. When this is the case, if life is yet left in the plant, it again takes root, and bears chess or timothy. It may turn to fox-tail grass. It is clear to my mind, for I have proved it, that wheat will sprout three times, and it is also clear that the first time it sprouts it will produce wheat every time. The change takes place when it has once sprouted, or taken root, and the roots have died or been broken off. I have produced the chess from as fine samples of wheat as ever grew, by the sprouting process. Another method is to select good healthy wheat roots, the last of March or the beginning of April, and transplant them or pull them up, to set them out again in the same place. As for the timothy, my observation has been this: I sowed the Black Sea variety of spring wheat, and the spring and summer being very dry, at harvest time I found many wheat stools green and fresh, and some had shot up heads, but they were short and perfectly green. After cutting the wheat, and until the next March, those late wheat stools kept spreading and looked healthy. A friend of mine, a thorough practical farmer then on a visit at my farm, concluded with me after observing how well they had withstood the winter, that they might make some choice variety of winter wheat. Accordingly he set about taking up some of the wheat roots. He was very cautious to get none but wheat roots, for they were easily distinguished by the large hollow straws with the green shoots attached to them at the time. Those hollow dry straws were the stubble of the green heads the previous harvest, and there was no possible chance for timothy roots to get there, for the ground was new prairie, first broken the previous season. We carefully transplanted them to a bed in the garden. The winter leaves soon began to fade and dry up, as do all winter wheat leaves when the plant starts to grow in the spring. I soon saw that the new leaves were more narrow and of a deeper green than the previous ones. The next change I noticed was the longest timothy heads I ever saw. Several of them measured over eleven inches in length. I will here add that I was as much surprised at seeing the transmutation as friend Worthington will be at seeing this communication, should you see fit to give it a place in your columns.

S. W. Standart.

Dodgeville, Wis., June 12, '56.

TOO MUCH LAND.

The great error with our American Agriculturists is a morbid desire to own and occupy more land than they can cultivate. Farming is a scientific business, and is capable of being reduced to rules as precise and accurate, and we may add, as successful as those which regulate the manipulatory processes of the practical chemist. Washington, whose discriminating powers were certainly of an exalted order, in one of his valuable epistles to the celebrated Arthur Young, says:—

"The agriculture of this country is indeed low; and the primary cause of its being so is, that instead of improving a little ground *well*, we attempt too much, and do it ill. A half, a third, or even a fourth of what we mangle, well-wrought and properly dressed, would produce more than the whole, under our system of management."

Few apothegms, uttered by the sage of Mount Vernon, are possessed of greater force than this, even at this day, and it would be well for our agriculturists who are so anxious to extend the limits of their farms, without manifesting any further desire to augment their productiveness and profit, if they would ponder it more carefully, and act more in accordance with the system it suggests. The most successful farmer with whom I have ever met, in any country, was a man whose entire homestead consisted of but fourteen acres. Like the Roman, Cressian, he managed to admirable advantage, everything within the amplitude of his profession, and derived, from this limited scene of operation, a living far superior in point of comfort and respectability, to that obtained by his more laborious neighbors, from farms, or freeholds rather, of quadruple the extent. We may form something like a correct conception of the actual capabilities of the soil, under proper management, by witnessing the operations of our gardeners. What is done or accomplished on a small scale, may certainly, with due care and effort, be accomplished on a large one; for gardening, which is so profitable, is nothing but farming in miniature.

[Germantown Telegraph.

No great deed is ever accomplished by consultation with too many persons.

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THE WHEAT FLY—AN EXPERIMENT.

According to M. Gorrie, (Magazine of Natural History,) the *larvæ* of the Wheat Midge or Weevil, deposited in the ears of wheat, leave them about the first of August and go into the ground, where it is "probable" they remain during the winter in the pupa state, and become flies the next season, when the wheat is in blossom.

For the purpose of testing this theory, and of ascertaining what might be done to arrest or retard the appearance of the fly in the proper season, the writer devised the following experiment:

Having constructed two boxes, each about three feet square and nine inches deep, covering the top with millinet, and leaving the bottom open to the ground, I selected a spot in the field where wheat had been harvested the preceding year, and where the wheat had been entirely destroyed by the weevil, and there placed the two boxes side by side —the first box on the ground that had remained undisturbed since the harvest—the second on ground that had just been turned over with a spade, ten inches deep. Care was taken to make the boxes tight and fit them closely to the ground, to allow no opening anywhere but through the meshes of the millinet top, which were sufficiently coarse to admit the light, air, and rain, and fine enough to prevent the escape of the flies, should any come out of the ground under the boxes.

The boxes were set about the first of June last. On the 12th of the same month, sure enough, the true wheat fly, the indubitable weevil, began to appear in the first box—some three or four only, at first, but increasing daily till the 26th, when there were some scores of them. From this time till the first of July they remained, as to numbers, about stationary, when apparently, all at once, there were several hundreds—the weather being very warm and somewhat showery—swarming in the clover now grown up thickly under the box. Coincident also with their appearance in the box, they were noticed in the adjacent clover of the field, in which they seemed to find an appropriate nursery home until strong enough to fly off to the fields of wheat.

In the meantime, the *second* box was carefully watched, and nothing was discovered therein up to the 28th of June. Supposing by this time that the spade had done an effectual work with the embryo weevil, this box was not noticed again till the 3d of July, when to my surprise, I counted nearly 150 flies, hanging torpidly, like mosquitoes, on the under side of the millinet Dividing the four days that occurred between the last two observations, it would fix the time of their appearance under the *second* box, on the first day of July—eighteen days after their appearance under the *first* box.

This simple experiment discloses some interesting facts:—

1. It demonstrates as a *fact*, what is stated only as a probability by M. Gorrie—that the weevil pupæ winter in the earth, and come out flies the ensuing season when the wheat is in blossom, to commence their work of destruction for the farmer, and of re-production for themselves.

2. It shows also, that to turn over the ground in the spring and sink the pupæ below their natural position, will proportionably retard the period of their development —a depth of ten inches retarding them in this instance, eighteen days. This length of time, later than its usual time of appearance, would render the fly comparatively harmless—the wheat being too far advanced to be seriously damaged. As the fly would find but very few heads still in blossom, but few eggs or larvæ would come to maturity if deposited; and in two or three years, if followed up, the weevil would disappear.

3. The most effectual remedy, therefore, would seem to be, *to sub-soil the stubble in the spring*. Even ordinary plowing, would, without doubt, considerably diminish the weevil, while, on the other hand, to seed with clover and leave the ground undisturbed the ensuing season, is the most effectual method of securing a large increase of the fly.

[H. DARLING, in Michigan Farmer.

The experiment above recorded, is one of the most valuable we have yet seen published relative to the wheat fly, and suggestive of a mode by which its ravages may be prevented. It will be recollected that last year, we suggested in the articles we published upon this pest, that it was necessary to study its habits before it would be known how to evade or prevent its ravages. The experiments of Mr. Darling not only show what the habits of the fly are, but also how those very habits may be taken advantage of to secure its own destruction. We hope this experiment will induce some of our wheat growers to try it upon a large scale.

We would make one correction, however, in Mr. Darling's article. He says he would "subsoil" in the spring. We should say "*trench plow*," or what will be better understood by most of our readers, turn in the stubble with a Michigan plow This is trench plowing upon a small scale, as the operation has the effect of turning the top soil into the bottom of the furrow, and covering it with the soil which the plow turns up from the bottom of each succeeding furrow. Our readers, we are sure, will thank Mr. Darling for this experiment, as fully as we do. [Michigan Farmer.

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ANIMAL HEAT—LOSS AND SUPPLY.

The following is one of a series of familiar letters on chemistry, by Prof. Liebig, which was recently published by Messrs. Fowlers & Wells in pamphlet form. It contains the full philosophy of loss and supply of animal heat, and like most of this great German philosopher's writings, every sentence is pregnant with ideas. In this one article we have the substance for a common volume—let its principles be carefully studied and remembered, as directly affecting the laws of health, and containing many good suggestions which may profitably be applied in the raising of stock.

The source of animal heat, its laws, and the influence it exerts upon the functions of the animal body, constitute a curious and highly interesting subject. All living creatures, whose existence depends upon the absorption of oxygen, possess within themselves a source of heat, independent of surrounding objects. This general truth applies to all animals, and extends to the seed of plants in the act of germination, to flower buds when developing, and to fruits during their maturation.

In the animal body, heat is produced only in those parts to which arterial blood, and with it the oxygen absorbed in respiration, is conveyed. Hair, wool, and feathers, receive no arterial blood, and therefore in them no heat is developed. The combination of a combustible substance with oxygen is, under all circumstances, the only source of animal heat. In whatever way carbon may combine with oxygen, the act of combination is accompanied by the disengagement of heat. It is indifferent whether this combination takes place rapidly or slowly, at a high or at a low temperature; the amount of heat liberated is a constant quantity.

The carbon of the food being converted into carbonic acid within the body, must give out exactly as much heat as if it had been directly burnt in oxygen gas or in common air; the only difference is, the production of the heat is diffused over unequal times. In oxygen gas the combustion of carbon is rapid, and the heat intense; in atmospheric air it burns slower, and for a longer time, the temperature being lower; in the animal body the combination is still more gradual, and the heat is lower in proportion.

It is obvious that the amount of heat liberated must increase or diminish with the quantity of oxygen introduced in equal times by respiration. Those animals therefore which respire frequently, and consequently consume much oxygen, possess a higher temperature than others, which, with a body of equal size to be heated, take into the system less oxygen. The temperature of a child (102°) is higher than that of an adult (99.5°). That of birds (104° to 105.4°) is higher than that of quadrupeds (98.5° to 100.4°,) or than that of fishes or amphibia, whose proper temperature is from 2.7° to 3.6° higher than that of the medium in which they live. All animals, strictly speaking, are warm-blooded, but in those only which possess lungs is the temperature of the body quite independent of the surrounding medium.

The most trustworthy observations prove, that in all climates, in the temperate zones, as well as at the equator or the poles, the temperature of the body in man, and in what are commonly called warm-blooded animals, is invariably the same; yet how different are the circumstances, under which they live!

The animal body is a heated mass, which bears the same relation to surrounding objects as any other heated mass. It receives heat when the surrounding objects are hotter, and loses heat when they are colder than itself. We know that the rapidity of cooling increases with the difference between the temperature of the heated body and that of the surrounding medium; that is, the colder the surrounding medium the shorter the time required for the cooling of the heated body.

How unequal, then, must be the loss of heat in a man at Palermo, where the external temperature is nearly equal to that of the body, and in the polar regions, where the external temperature is from 70 to 90 degrees lower! Yet, notwithstanding this extremely unequal loss of heat, experience has shown that the blood of the inhabitant of the arctic circle has a temperature as high as that of the native of the south, who lives in so different a medium.

This fact, when its true significance is perceived, proves that the heat given off to the surrounding medium is restored within the body with great rapidity. This compensation must consequently take place more rapidly in winter than in summer, at the pole than at the equator.

Now, in different climates the quantity of oxygen introduced into the system by respiration, as has been already shown, varies according to the temperature of the external air; the quantity of inspired oxygen increases with the loss of heat by external cooling, and the quantity of carbon or hydrogen necessary to combine with this oxygen must be increased in the same ratio.

It is evident that the supply of heat lost by cooling is effected by the mutual action of the elements of the food and the inspired oxygen, which combine together. To make use of a familiar, but not on that account less

just illustration, the animal body acts, in this respect, as a furnace, which we supply with fuel. It signifies nothing what intermediate forms food may assume, what changes it may undergo in the body, the last change is uniformly the conversion of its carbon into carbonic acid, and of its hydrogen into water. The unassimilated nitrogen of the food, along with the unburned or unoxydized carbon, is expelled in the urine or in the solid excrements. In order to keep up in the furnace a constant temperature, we must vary the supply of fuel according to the external temperature, that is, according to the supply of oxygen.

In the animal body the food is the fuel; with a proper supply of oxygen we obtain the heat given out during its oxidation or combustion. In winter, when we take exercise in a cold atmosphere, and when consequently the amount of inspired oxygen increases, the necessity for food containing carbon and hydrogen increases in the same ratio; and by gratifying the appetite thus excited, we obtain the most efficient protection against the most piercing cold. A starving man is soon frozen to death. The animals of prey in the arctic regions, as every one knows, far exceed in voracity those of the torrid zone.

In cold and temperate climates, the air, which incessantly strives to consume the body, urges man to laborious efforts in order to furnish the means of resistance to its action, while, in hot climates, the necessity of labor to provide food is far less urgent.

Our clothing is merely an equivalent for a certain amount of food. The more warmly we are clothed the less urgent becomes the appetite for food, because the loss of heat by cooling, and consequently the amount of heat to be supplied by the food, is diminished.

If we were to go naked, like certain savage tribes, or if in hunting or fishing we were exposed to the same degree of cold as the Saymoyedes, we should be able with ease to consume 10 pounds of flesh, and perhaps a dozen of tallow candles into the bargain, daily, as warmly clad travelers have related with astonishment of these people. We should then also be able to take the same quantity of brandy or train oil without bad effects, because the carbon and hydrogen of these substances would only suffice to keep up the equilibrium between the external temperature and that of our bodies.

According to the preceding expositions, the quantity of food is regulated by the number of respirations, by the temperature of the air, and by the amount of heat given off to the surrounding medium.

No isolated fact, apparently opposed to this statement, can affect the truth of this natural law. Without temperate or permanent injury to health, the Neapolitan cannot take more carbon and hydrogen in the shape of food than he expires as carbonic acid and water; and the Esquimaux cannot expire more carbon and hydrogen than he takes into the system as food, unless in a state of disease or of starvation. Let us examine these states a little more closely.

The Englishman in Jamaica perceives with regret the disappearance of his appetite, previously a source of frequently recurring enjoyment; and he succeeds by the use of cayenne pepper, and the most powerful stimulants, in enabling himself to take as much food as he was accustomed to eat at home. But the whole of the carbon thus introduced into the system is not consumed; the temperature of the air is too high, and the oppressive heat does not allow him to increase the number of respirations by active exercise, and thus to proportion the waste to the amount of food taken; disease of some kind, therefore, ensues.

On the other hand, England sends her sick to southern regions, where the amount of oxygen inspired is diminished in a very large proportion. Those whose diseased digestive organs have in a greater or less degree lost the power of bringing the food into the state best adapted to oxidation, and therefore are less able to resist the oxidizing influence of the atmosphere of their native climate, obtain a great improvement in health. The diseased organs of digestion have power to place the diminished amount of food in equilibrium with the inspired oxygen in the mild climate; while in a colder region the organs of respiration themselves would have been consumed in furnishing the necessary resistance to the action of the atmospheric oxygen.

In our climate, hepatic diseases, or those arising from excess of carbon, prevail in summer; in winter, pulmonary diseases, or those arising from the excess of oxygen, are more frequent.

The cooling of the body, by whatever cause it may be produced, increases the amount of food necessary. The mere exposure to the open air, in a carriage or on the deck of a ship, by increasing radiation and vaporization, increases the loss of heat, and compels us to eat more than usual. The same is true of those who are accustomed to drink large quantities of cold water, which is given off at the temperature of the body, 98.5 degrees. It increases the appetite, and persons of weak constitution find it necessary, by continued exercise, to supply to the system the oxygen required to restore the heat abstracted by the cold water. Loud and long continued speaking, the crying of infants, moist air, all exert a decided and appreciable influence on the amount of food which is taken.

We have assumed that it is especially car-

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bon and hydrogen which, by combining with oxygen, serve to produce animal heat. In fact, observation proves that the hydrogen of the food plays a not less important part than the carbon.

The whole process of respiration appears most clearly developed, when we consider the state of a man, or other animal, totally deprived of food.

The first effect of starvation is the disappearance of fat, and this fact cannot be traced either in the urine or in the scanty fæces. Its carbon and hydrogen have been given off through the skin and lungs in the form of oxidized products; it is obvious that they have served to support respiration.

In the case of a starving man, 32 1-2 oz. of oxygen enter the system daily, and are given out again in combination with a part of his body. Currie mentions the case of an individual who was unable to swallow, and whose body lost 100 lbs. weight during a month; and, according to Martell, a fat pig, overwhelmed in a slip of earth, lived 160 days without food, and was found to have diminished in weight, in that time, more than 120 pounds, The whole history of hybernating animals, and the well established facts of the periodical accumulation, in various animals, of fat, which, at other periods, entirely disappears, prove that the oxygen, in the respiratory process, consumes, without any exception, all such substances as are capable of entering into combination with it. It combines with whatever is presented to it; and the deficiency of hydrogen is the only reason why carbonic acid is the chief product; for, at the temperature of the body, the affinity of hydrogen for oxygen far surpasses that of carbon for the same element.

We know, in fact, that the graminivora expire a volume of carbonic acid equal to that of the oxygen inspired, while the carnivora, the only class of animals whose food contains fat, inspire more oxygen than is equal in volume to the carbonic acid expired. Exact experiments have shown, that in many cases only half the volume of oxygen is expired in the form of carbonic acid. These observations cannot be gainsayed, and are far more convincing than those arbitrary and artificially produced phenomena, sometimes called experiments; experiments which, made as too often they are, without regard to the necessary and natural conditions, possess no value, and may be entirely dispensed with; especially when, as in the present case, nature affords the opportunity for observation, and when we make a rational use of that opportunity.

In the progress of starvation, however, it is not only the fat which disappears, but also, by degrees, all such of the solids as are capable of being dissolved. In the wasted bodies of those who have suffered starvation, the muscles are shrunk and unnaturally soft, and have lost their contractility; all those parts of the body which were capable of entering into the state of motion have served to protect the remainder of the frame from the destructive influence of the atmosphere. Toward the end, the particles of the brain begin to undergo the process of oxidation, and delirium, mania, and death close the scene; that is to say, all resistance to the oxidizing power of the atmospheric oxygen ceases, and the chemical process of eremacausis, or decay, commences, in which every part of the body, the bones excepted, enters into combination with oxygen.

The time which is required to cause death by starvation depends on the amount of fat in the body, on the degree of exercise, as in labor, or exertion of any kind, on the temperature of the atmosphere, and finally, on the presence or absence of water. Through the skin and lungs there escapes a certain quantity of water, and as the presence of water is essential to the continuance of the vital motions, its dissipation hastens death. Cases have occurred, in which a full supply of water being accessible to the sufferer, death has not occurred till after the lapse of twenty days. In one case, life was sustained in this way for the period of sixty days.

In all chronic diseases death is produced by the same cause, namely, the chemical action of the atmosphere. When those substances are wanting, whose function in the organism is to support the process of respiration; when the diseased organs are incapable of performing their proper function of producing these substances; when they have lost the power of transforming the food into that shape in which it may, by entering into combination with the oxygen of the air, protect the system from its influence, then, the substance of the organs themselves, the fat of the body, the substance of the muscles, the nerves, and the brain, are unavoidably consumed. The true cause of death in these cases is the respiratory process, that is, the action of the atmosphere.

A deficiency of food, and a want of power to convert the food into a part of the organism, are both, equally, a want of resistance; and this is the negative cause of the cessation of the vital process. The flame is extinguished, because the oil is consumed; and it is the oxygen of the air which has consumed it.

In many diseases substances are produced which are incapable of assimilation. By the mere deprivation of food, these substances are removed from the body without leaving a trace behind; their elements have entered into combination with the oxygen of the air.

From the first moment that the function

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of the lungs or of the skin is interrupted or disturbed, compounds, rich in carbon, appear in the urine, which acquires a brown color. Over the whole surface of the body oxygen is absorbed, and combines with all the substances which offer no resistance to it. In those parts of the body where the access of oxygen is impeded; for example, in the armpits, or in the soles of the feet, peculiar compounds are given out, recognizable by their appearance, or by their odor. These compounds contain much carbon.

Respiration is the falling weight—the bent spring, which keeps the clock in motion; the inspirations and expirations are the strokes of the pendulum which regulate it. In our ordinary time-pieces, we know with mathematical accuracy the effect produced on their rate of going, by changes in the length of the pendulum, or in the external temperature. Few, however, have a clear conception of the influence of air and temperature on the health of the human body; and yet the research into the conditions necessary to keep it in the normal state, is not more difficult than in the case of a clock.

For the Farmer.

WHY DON'T MY WHEAT TURN TO CHESS?

I commenced farming in 1841, in the State of Ohio. The first wheat I sowed I bought of a neighbor who called it clean seed, but on examination I found it contained quite a sprinkling of chess. He said it made no difference, as wheat would turn to chess. I sowed it and the result was a tolerably good crop of wheat and about half as much chess. As I was on a new farm in the timber region, I had the advantage of a clean soil, and resolved to sow wheat and nothing but wheat. Mark the result: From that time till the present the result has been wheat and nothing but wheat. One field which I rented to a neighbor, however, got pretty well peppered with chess.

In the summer of '54 I entered the land on which I now live, and got a piece broken and sowed to winter wheat; but not being ready to move on to it, was unable to get it fenced till the following spring, and the cattle and hogs kept it fed close in the fall and, in December, we had a thawy, open spell of weather, so that the hogs took it out, almost roots and all. Besides all that, my seed wheat was badly grown; but as I could get no other clean seed, I preferred grown seed to foul seed. The advocates of transmutation said that I would have a fine crop of chess. The wheat was examined closely before and after harvesting, and not a grain of chess could be found. After it was threshed and cleaned up I offered a premium of twenty-five cents for every grain of chess, cockle, or rye, that could be found in the whole pile. Some of our transmutationists said that if I would sow the same ground with wheat the next year, I would certainly raise a crop of chess. Well, I followed their directions, and the result is that I have as fine a crop of wheat, I think, as can be found in the county, just ready to harvest, and not a head of chess is to be seen.

On one side of the field we chopped and hauled off some girdled timber, and killed out the wheat, but the result is the same as where the hogs rooted out the wheat the previous year. If it changed to anything, it must certainly have been pig-weeds, as they grew profusely, and to an enormous size, wherever the wheat was killed out. As I have been altogether unsuccessful, thus far, in raising chess, if some of the advocates of transmutation will, through the FARMER, give full directions for turning wheat to to chess, I will make the experiments carefully, and note the result through the same medium. But until I am convinced that wheat will turn to chess, I shall be very careful not to sow any with my wheat. My wheat brings me twenty-five cents on every bushel above the market price of common good wheat—for seed—at home, without the trouble of hauling it off.

MILO BALDWIN.

JACKSON, Adams Co., July 8, 1856.

ECONOMY is not the mean "penny wise and pound foolish" policy which many suppose it to be; it is the art of calculation joined to the habit of order, and the power of proportioning our wishes to the means of gratifying them. This little pilfering temper of a wife is despicable and odious to every man of sense; but there is a judicious, graceful economy, which has no connection with an avaricious temper, and which, as it depends upon the understanding, can be expected from cultivated minds. Women who have been well educated, far from despising domestic duties, will hold them in high respect, because they will see that the whole happiness of the life is made up of the happiness of each particular day and hour, and that much of the enjoyment of these must depend upon the punctual practice of those virtues which are more valuable than splendid.

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For the Farmer.

MANAGEMENT OF BEES.

MESSRS. EDITORS—In your June number "J. C. K." asks the question, "Is it possible for one ignorant of all practical knowledge on the subject, to successfully undertake the management of a few bee-hives?" I suppose it matters but little to the inquirer, from whence the information comes, provided it is reliable. As for my experience in the matter, it is very limited, having had no experience except for the two last years. As to wintering them, I put them in my cellar, being careful to set the hives up two or three feet from the ground, and stop up the places that the bees usually come out at, and then to bore two or three gimlet holes through the hive, to let in a sufficient quantity of air. The object of stopping up the hive is to keep the bees from coming out whenever any one enters the cellar with a light. A year ago last fall I had one swarm, that, I am sure, had not more than half honey enough to winter them on. I fed them clarified sugar all winter, by putting it on a plate and setting it under the hive. I succeeded in getting them safely through. The only serious difficulty with me, I think will be, in wintering them, as they do not seem to be very spiteful towards me, for I act upon the principle of, "Let me alone, and I will let you alone." The following information, which may be of some benefit to some of my fellow farmers, was derived, a few years since, from a gentleman of the most experience in the management of bees of any individual I ever met with. He says: "There are two causes why bees do not do well, after having been kept for several years in one place. The first reason is, the country gets over stocked, so that the bees cannot obtain honey sufficient to winter on. But the greatest cause is, the practice of putting cap on the hives, from year to year, thereby allowing all the old comb to remain in the hive."

He says that the bees put a new coat or lining over each cell, every spring. The result is, the cells soon become so small that they can neither deposit their honey nor lay their eggs in them; consequently, when the comb all gets old, the bees will soon begin to die. I also judge this to be the case, from the fact that, I have already noticed that all the old comb, whether in a tree or hive, has nothing in it. Now for the remedy: Put the top of your hive on with screws, instead of nails, so that it may be easily taken off. When you wish to take out any honey, take off the top of the hive, drive the bees down with tobacco smoke, and then carefully take out one half the honey from the top part of the hive. The next year, turn your hive up and take out of the bottom end. In following this method, you will always have comb in the hive, in which your bees can be hatched.

Yours respectfully,

WM. F. CHIPMAN.

WARREN, Waushara Co., July 8, '56.

For the Farmer.

PATENT OFFICE SEEDS.

MESSRS. EDITORS—I received early in April, through the polite attention of our Representative in Congress, from the Patent Office in Washington, a few seeds of what is called the Prickly Seeded Spinach—a variety of the *Spinacia oleracia*, selected in England. It is a variety sowed there in the fall for early spring use. But I sowed these on the 5th of April; on the 4th of June they were served on our table. I did not take them from the garden as early as I might have done, nor had I taken pains to press forward their growth. Had I used warm manure, I think we might have had them for use early in May. I found them to be a very choice article of greens, superior to any greens of early spring culture I have ever eaten; and I recommend them to all who desire to have a hardy, early, and excellent vegetable for that season of the year when greens are particularly acceptable.

Through the FARMER, permit me to return my thanks to our Representative C. C. WASHBURN, and our Senator, CHARLES DUNKEE, for their attention in having me furnished with specimens of various seeds during the past spring.

Yours respectfully,

WM. HENRY BRISBANE.

ARENA, Wis., July 6, 1856.

WHEN a man stops his newspaper on account of pecuniary foreboding, he may be considered about as far gone as if he should conclude to stop his daily bread for fear he should come to poverty. [Am'n. Agr'l'st.

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For the Farmer

THE LAST SEVERE WINTER.

MESSRS. EDITORS.—I am very sorry to report the loss of some 80 apple trees, some of which had been in bearing for three years. I have cultivated very highly, manured and mulched thoroughly—usually planting corn in the orchard—and have taken a great deal of pleasure in seeing my trees grow; but, alas, part of them are gone, or at least, their life is gone. They were Eastern trees, and I think that I have now learned one or two lessons from their loss—*first*, Eastern trees, especially root grafts, may go by for all me; *secondly*, good thrifty seedlings from neighboring nurseries I think I should prefer, and after they have a good start, graft them at the top!

All my cultivated Plum and Cherry trees are also done for. I suppose they died of the same complaint, namely: an over dose of manure. My Currants and other small fruit are doing well.

Spring wheat looks very good in our vicinity. Oats, also, appear to be in a flourishing condition. The grass on the marshes looks fine, and we have some heavy timothy for this State. Corn looks very well, but there has been some failure in the seed.

Can I get a copy of the Transactions, and extra or back copies, at the State Fair, next fall? Yours, &c. A. B. PEASE.

ROSENDALE, Fond du Lac Co., July 6, '56.

We intend to have copies of the Transactions of the State Agricultural Society at the Fair in October, and we shall be happy to supply friend PEASE and all others who may wish. The last winter has done severe *pruning* everywhere, and taught many lessons, if properly understood. We are sorry to say the havoc has not been *confined* to Eastern trees. EDS.

SMILES AND FROWNS.—Which will you do—smile, and make your household happy, or be crabbed, and make all those young ones gloomy, and the elder ones miserable? The amount of happiness you can produce is incalculable, if you show a smiling face, a kind heart, and speak pleasant words. Wear a pleasant countenance; let joy beam in your eyes, and love glow on your forehead. There is no joy like that which springs from a kind act or a pleasant deed; and you feel it at night when rest, at morning when you rise, and through the day when about your business. [Home Journal.

For the Farmer.

IOWA COUNTY AGRICULTURAL SOCIETY.

DODGEVILLE, Wis., July 6, '56.

MESSRS. POWERS & SKINNER,

GENTS: On the 26th of June, ult., many citizens of Iowa County assembled at Dodgeville, and organized the Iowa County Agricultural Society. Hon. H. M. Billings was unanimously elected President of the said society; Hon. Levi Sterling, L. W. Joiner and Samuel Hendy, Vice Presidents.

Respectfully &c.,

GEO. MASTERSMITH,

Recording Secretary.

A LESSON FROM THE BIRDS.

A gentleman observed in a thicket of bushes near his dwelling a collection of brown thrushes, who for several days attracted his attention by their loud cries and strange movements. At length curiosity was so much excited that he determined to see if he could ascertain the cause of the excitement among them.

On examining the bushes, he found a female thrush, whose wing was caught in a limb in such a way that she could not escape. Near by was her nest, containing several half-grown birds. On retiring a little distance, a company of thrushes appeared, with worms and other insects in their mouths, which they gave first to the mother and then to her young; she the meanwhile cheering them in their labor of love with a song of gratitude.

After watching the interesting scene until curiosity was satisfied, the gentleman released the poor bird, when she flew to her nest with a grateful song to her deliverer, and her charitable neighbors dispersed to their usual abodes, singing, as they went, a song of joy. [National Intelligencer.

AN IMPROVEMENT IN CARRIAGES.—An invention for making the connection of the pole or the shafts of a carriage more safe, has been exhibited in Cincinnati. A small block of vulcanized India-rubber is inserted in the space, which, in what is called the clip or shackles of the shaft, intervenes between the clip-tire and the round head of the shaft, through which the connecting ball is passed. The block of India-rubber holds the ball in its place with a firm but elastic pressure, and entirely prevents it both from rattling or becoming loosened by motion. The application of this contrivance causes the play of the machinery of the carriage to be performed in perfect silence, and by keeping the bolt in its place, and preventing the nut screwed to it from loosening by motion, obviates the liability to accident.

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STOCK REGISTER.

For the Farmer.

BLACK LEG.

MESSRS. EDITORS—This peculiar disease is met with in nearly every part of our country. Cattle, from four months to two years old, if they are either fat or in a thriving condition, are liable to this horrid disease. The symptons are at once sure and terrible. The beginning of the Black Leg is usually, but not always, confined to the lgs; when beginning here you first discover swelling and lameness in the hip. The animal soon refuses its food, the eyes assume a wild or vacant stare, the breath is hot and hurried, the bowels costive, and the atmosphere around the animal becomes fetid. By rubbing the hand over the afflicted parts a crackling sound is made under the hide. A strong solution of water and saltpeter, given in time, and copioun bleeding in the neck, will sometimes cure it. H. R.

SPRINGVALE, Wis. April 14, '56.

For the Farmer.

FEEDING COWS DURING WINTER.

MESSRS. EDITORS—I have a little experience in the above line. About two years ago, I bought a cow that had been wintered in the too common Wisconsin manner—that is, upon straw, with an occasional "angel's visit" of an ear of corn. She gave during ten months, 2,800 quarts of milk. The next winter she was put upon a diet of good timothy hay, corn-stalks, rutbagas, and carrots, and the next season of 10 months, she gave 5,060 quarts of milk—the pasture being the same both years. The extra feed during the winter would not exceed $10 above the straw system. All who have been acquainted with the price of butter during the last twelve months, will know whether I got the $10 back or not. J. T.

CLINTON, Wis., June 26, 1856.

TO PREVENT HOOF AIL IN CATTLE.—At this season of the year, when cows are put on low and swampy ground, they are liable to get the ground itch or lameness in the feet. To prevent this, take some fresh lime and put each side of the bars or where they will tread in it several times a day, taking care to add more lime occasionally. Formerly my cows suffered severely; since I have used lime as above, (about three years,) I have not had a lame cow.

SKIN DISEASES OF DOMESTIC ANIMALS.

This is a topic demanding the earnest attention of stock-breeders and farmers generally. Skin diseases, produced by insects, are by no means uncommon, and seriously affect the breeding and feeding qualities of animals. Till recently, but little scientific progress had been made in regard to the natural history and treatment of these parasites. Professor Simonds, the Veterinary Inspector of the Royal English Agricultural Society, recently delivered a lecture before the Council on this subject, from which the following statements are gleaned:

All domesticated animals are more or less affected by peculiar parasitical insects, which may be divided into three great classes—1. Insects attacking the external parts of the body, on which they pass through the whole period of their existence, as the *acari*, producing scab, magi, &c. 2. Insects which pass their larvæ condition only on the skin, as a temporary *nidus*, from which they escape as flies on assuming their winged condition. 3. Insects, most destructive to animal life, lodged in the internal organs and cavities of the body.

Some confusion had arisen from giving different names in case of lower animals to diseases identical in their character; the mange and scab in the horse and sheep being analogous to the itch or scabies in the human subject. It would be more simple to include all such diseases under the general term "scabies."

It is well known, both in Canada and Europe, that the scab often leads to serious losses to flockmasters, by its tendency to deteriorate the wool and the general condition of the animal. Its cause was not satisfactorily determined, till a German physiologist clearly proved the wide distribution of acari or mites, in dirt or filth, sugar, cheese, flour, and most vegetable substances. He found that the male and female acarus of the horse and of the sheep possessed well defined characters in the case of each of those animals, the former being the cause of the mange, and the latter of the scab. These mites have the power of traveling from one animal to another; and the scab disease of sheep will sometimes affect the whole flock, if not arrested. From carefully conducted experiments, Professor Simonds concludes that the mites belonging to one class of animals could not engender the same disease on the bodies of another class; that the mite which produced scab on sheep was not capable of producing mange on the horse or dog. This conclusion, however, from recent experiments made in Germany, may be regarded as somewhat doubtful.

The deposition of the acari on the skin of the sheep and the development of the scab

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disease, may be traced as follows:—"First, a slight redness comes on the skin, albuminous fluid is exuded, which mats the adjoining wool. In a few days, definite pain is felt by the animal, which violently attempts to scratch itself by rubbing the part against any resisting object. The irritation extends to ten or twelve inches. The disease makes rapid progress. Acari had traveled over other parts of the body. In sixteen days, fifty or sixty eggs of the acarus were found at the base of the wool. Large thickened crusts of a white appearance were formed. The health of the animal and its skin became generally affected. Large scales or scabs ensued, which, on being raised, a great number of acari could be detected. Inflammation on the skin ensued. The itch in the human subject arose from the same cause; the acarus burrowed beneath the scale of the epidermis, or outer skin. This affectation was known to be more communicable when the person was warm in bed, the acari then coming freely out and extending their operations. The itch-mite insinuated itself *within* the skin, while the mites of the horse and sheep made their attacks *upon* the skin."

These minute creatures are wonderfully endued with the power of extracting the juices of the skin by their suctorial discs; of adhering to the wool or hair by their hooklets; and their trumpet-shapen apendages enable them to hold themselves securely by valves to flat surfaces. The female mite is larger than the male, and is adapted to propagation, while the male is peculiarly formed for sucking the skin. The disease is the result of their joint action. Professor Simonds had found these scab-mites alive and vigorous fourteen days after they had been removed from the backs of the sheep; and he considers that there is great risk to any fresh healthy flock occupying the ground from which infected sheep had been removed less than two or three weeks.

The cure of scab is not generally a simple process. The cause must be thoroughly removed, viz: the destruction not only of the mites, but their *eggs* also. Many of the proposed remedies destroy the insects, but not the eggs, which in a few days may turn out a fresh swarm of living creatures. Dippings, ointments, &c., occasionally, all failed, by not reaching the eggs. Arsenical applications are more potent; but from their virulent poisonous nature, require the greatest care in applying. The preferable form of such solution is that of arseniate of potash, blended with vegetable infusions, such as those of foxglove, henbane, dock-roots, &c. Two ounces of common arsenic and two ounces of carbonate of lime, boiled together in a quart of water, until dissolved, when a further quantity of water may be added. To this gallon of solution a gallon of vegetable infusion may be added, made by pouring a gallon of boiling water over four ounces of foxglove leaves, and allowing the infusion to remain till cold, when it may be poured off. Half a pint of it, at intervals of a few days, should be sprinkled (from a bottle, through a quill in the cork) on the skin at the back and sides of the sheep. Two or three dressings will generally be found sufficient to cure the most inveterate cases of scab.

Parasitical insects often travel to other animals; and without producing the identical diseases as they do on the animals to which they naturally belong, nevertheless they frequently occasion a great amount of local irritation of an annoying character on the skin. Poultry sometimes swarm with insects, especially lice and mites, which often travel to other animals. Horses may appear to have the mange, while the effect is simply the inflammation produced by poultry ticks, and admits of easy cure by means of oil impregnated with sulphur.

The *warbles* belong to a class of parasitical insects, which pass only one period of their existence in the skin of animals, the short period of their larvæ or grub state—before they assume their winged form as flies. Small tumors are commonly seen on the backs of the farmer's best-doing stock, each containing a small maggot, grub, or bot, the larvæ state of the gad or breeze fly. Some species of this fly deposit their eggs in the nostrils of sheep and in the hair and skin of horses, where they are hatched; being licked up by the horse, and passing into the stomach, and afterwards through the intestines as bots. The cattle gad-fly deposits its very minute egg on the skin of the animal, which, being hatched by heat, passes beneath the scarf skin, and lays secure, feeding on the unctuous secretions of that integument. It afterwards burrows into the skin, and insinuates itself below it, and thus remains secure all winter. In the spring diffused swellings are observed on the backs of cattle, which give pain on pressure, in consequence of inflammation. The grub lies in its nidus, or nest, within the true skin, till the approach of summer, when its white color becomes dark, and it makes its way out of its retreat. On the ground it soon assumes the chrysalis state, escapes from its shell as a gad-fly, lays its eggs, and dies. The eggs again produce grubs, and the same wonderful cycle of changes succeeds. It is the same with the bots of the horse. When they lost at maturity their power of attaching themselves to the stomach, they slipped their holdings, and passed out of the stomach through the intestines to the ground, when they assumed the chrysalis state and became

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flies. The egg of the sheep gad-fly was deposited about the middle or latter end of summer. The sheep were then herded together with their heads down, and violently stamping with their feet. The fly at length deposited its egg in their nostrils, and the hatched grub penetrated through the intermediate cavities to the frontal sinuses, when a plate of bone prevented its getting into the brain. Various affections in the brain of sheep, such as virtigo, gig, giddy, turnsick, goggles, &c., have been erroniously ascribed to the gad-fly, but they have a totally different origin, viz: arising from the formation of little sacs or bladders, containing hydatids. The mange in dogs is owing to the dog-flea; an insect that was the fruitful source of diseased action of the animal's skin, when it generated and passed through all its various gradations of existence.

The prevention of contagion among animals may be summed up in two words—*improved management*. Cleanliness, ventilation, exercise, nutritions diet, and temperance, have affected the most beneficial changes on the human race, within a comparatively short period of time; and it is but reasonable to conclude that similar causes will produce similar results among our domesticated animals. We have yet much to learn and to do in relation to these important matters. [Canadian Agriculturist.

Scratches in Horses—May be cured, unless very inveterate, by washing thoroughly with soap-suds, and then rubbing with lard fried out of salt meat. Keep clean, and wash and grease every other day until a cure is effected. Leaveing mud to dry upon the legs of a horse, is one great cause of this disease, and many horses are injured by want of care and cleanliness when driven in muddy weather.

To Prevent a Cow from Fretting after her Calf.—Let the calf wear a strap around the neck; when taken from the cow, put the strap around the cow's horns. The smell of the calf that remains on the strap will in a great measure prevent her fretting. If she has been accustomed to go to her calf at noon, let her be milked for a few days at the same time.

To Break a Cow from Sucking Herself.—Take a small stick of hickory wood, about eight inches long, about as thick as a man's little finger, make it smaller in the middle than at either end, take a sharp-pointed knife, make a cut in the thin part of the cow's nose, large enough for the pin to go in tight; grease the stick a little; the cut will soon get well. It is impossible for a cow to suck herself while the pin is in. She will soon forget it, and the pin can then be removed. It is far preferable to wearing a yoke.

For the Farmer.

SHEEP.

Messrs. Editors—I have a small flock of sheep, amongst which are fifty-three French and Spanish Merino ewes. About the 10th of June, ult., I sheared these ewes, sold to me by Messrs Rosier and McAllister as thorough bred Merinos, which yielded me an aggregate of 281 lbs of cleanly washed wool, (about 5 1-3 lbs. each) besides raising me forty lambs; and for this wool I received at home 41 1-4 cents per pound, or a little short of $2 20 per fleece.

I have several objects in view in making this statement, three of which are:

1st. To gratify my own vanity—I like to do whatever I undertake, at least, as well as my neighbors, and if any of them can beat this, I should like to be informed of it, that I may try again.

2d. To encourage the introduction of *good* stock into the country. I have yet to find that it costs any more to keep a sheep worth twenty dollars, than one worth two dollars, but I have already found the clear profit to be much greater—and

3d. To do justice to Messrs. Rosier and McAllister, of whom I purchased this share of my stock.

I was no judge of sheep, and purchased entirely on the statement of these gentlemen, who were strangers to me, and who, at my request, selected from their flock for me, a part of the lot.

It is so seldom that we meet with strangers, who are not ready to take advantage of us when thus in their power, that it affords me great pleasure to volunteer this tribute to what, at least, so far, seems to me an honorable exception, and to recommend to the farmers of Wisconsin the fine flocks wich these gentlemen are now scattering over our State. Yours truly,

Alfred L. Castleman.

Prof. St. Hilaire, a distinguished German savant, has lately delivered two lectures on the advantages of bringing horse-flesh into use as food. He says the horse is herbiverous, and no deleterious element enters into its food or structure. We understand that the Norwegians are great consumers of horse-flesh. [Veterinary Journal.

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SHORT HORNED BULL—"ROMEO."

His Color is a Red roan; calved April, 1850; bred by Marquis of Exeter, Burghley House, Stamford; imported by N. J. Becar and L. G. Morris, and selected by Mr. M. in 1852.

"*Romeo*" is recorded and illustrated in 11th vol. of Coates' Herd Bood, page 229.

Romeo won the first prize laurels as the best bull over three years old at the following shows:—New York State Show at Saratoga, 1853; American Institute, 1853; U. S. Agricultural Society at Boston, 1855; and illustrated in U. S. Transactions for 1855, page 45.

This splendid specimen animal is now the property of Messrs. Reber & Coutts, of Lancaster, Ohio, who purchased him at the recent sale of Lewis G. Morris, Esq. He is probably as fine a model of the true Short Horn as can be found in this country, and well worthy of the study of those who would get an ideal of the right kind fixed in their mind's eye.

We understand that Messrs. R. & C. have a splendid herd of some fifty head of thorough bred animals, and are gentlemen of great enterprise in such matters.

When will any of our wealthy and patriotic citizens imitate their example? May be before Wisconsin is as old as Ohio. As yet, our taste and spirit seem pretty much absorbed in a love of fast horses; and the consequence is, that both beef and butter are scarce and inferior, and will continue so to be until the taste for cattle breeding is more extensively cultivated.

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HORTICULTURE.

THE FRUIT CROP FOR 1856.

All the leading kinds of fruit are bound to be a short crop, throughout the Northern and Western States. Peaches are scarcely to be heard of in those regions in the Western and Middle States where hitherto they have been the most abundant. But in their stead, dry branches and dead trees appear on all hands, from Wisconsin to Massachusetts—the result of the last cold winter. Through Michigan, Indiana and Ohio, we noticed them on all sides; and hardly an instance of a live tree with fruit upon it.

The apple crop, also, bids fair to be remarkably short. We hardly saw a tree well loaded with fruit, in traveling a thousand miles. This must also be owing to the winter, as the failure could hardly otherwise be so general. Pears and plums are also said to be equally scarce; and cherries, which are now in their season, are not very abundant nor good, if the show in the market is a fair criterion. We will venture to predict that the fruit shows the coming fall will be meagre enough, as well as the supplies for use.

Nothing seems more remarkable than the almost entire absence of good, well set, and well kept orchards, through all the country from Wisconsin to Maine. In going one route and returning another, we hardly saw a good farm orchard in the whole distance; but multitudes of miserable, scrawny, leaning, unpruned trees—invariably struggling in grass and weeds, and often showing specimens of the hardest, and sourest seedling fruit, at that.

Surely none need be alarmed with the fear that the country will soon be overstocked with good fruit, of any kind; not even apples. We solemnly assure all tree planters, that there is no sort of danger, more than there is of the world's being overstocked with good men. Extraordinary good things are not of spontaneous growth; and the habitual carelessness and negligence of nine-tenths of mankind, is such, (though lamentable the fact,) that all the preaching, and punching of horticultural writers, seems to fall like an idle word upon a thoughtless brain and deaf ear. We fear the world, (or its inhabitants,) has yet a great deal of progress to make in these traits of character, before it is near what it should be.

STRAWBERRY CULTURE.

Situation and Soil.—A warm and sheltered situation, with a moist gravelly loam, is the most desirable combination of circumstances; but in its absence, the next best place that one may have, will answer every purpose. If too dry, the plants will need occasional watering; if too wet, then drainage will be needed, or, in its absence, a high hilling system of cultivation.

Preparation of Soil.—This is an important matter, and unless it is done well, good crops cannot be expected. It must be plowed or spaded deep—not less than 18 to 20 inches; and the finer it is pulverized the better. If new, and ordinarily rich western soil, no manure may be needed at first; but if the soil is light, it is important to spade in a sufficient amount of the right kind of manure to give it the proper tone, as it is very difficult to apply it efficiently when the surface of the ground is planted, and much depends on the kind of manure used.

It seems to be a well established fact, that barn-yard, and animal manures generally, are unfit, because they produce too much growth of vines and runners, and too little of fruit. This fact understood, would undoubtedly explain to many, why their vines, which perhaps are thrifty and fine, do not bear fruit.

To bear fine and abundant fruit, the plant must be fed with the proper elements to make it. What could be more simple or natural? The strawberry, pleasant as it tastes, is found, on analysis, to be composed about two-thirds of potosh, lime and salt. What unread person, who ever tasted of pure

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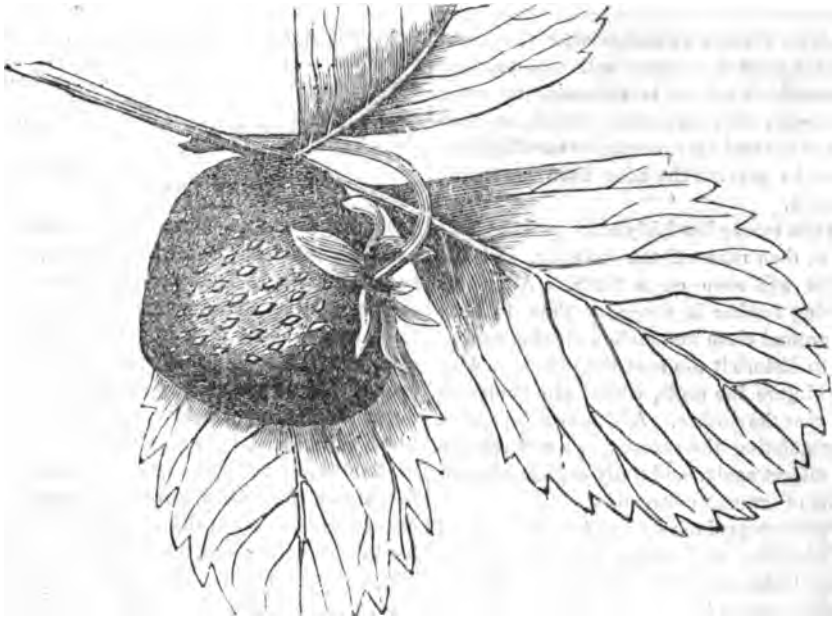

HOVEY'S SEEDLING.

potash, would believe it? yet so it is notwithstanding, as an accompanying chemical analysis will show almost a quarter pure potash, more than a quarter pure salt, and about one-sixth pure lime. Think of this, you strawberry eaters, who are afraid to drink lime water.

Instead of animal manures, where any is used, apply ashes, (leached or unleached,) lime and salt, in about such proportions as above stated, and the results will not be doubtful.

VARIETIES.—Hovey's Seedling, Burr's New Pine, McEvoy's Superior, and the Crimson Cone, are good Pistillate varieties.

The Large Early Scarlet and the Iowa, are good Staminate varieties, and perfectly well proved in this climate.

By a little inquiry, most of these varieties can be found in every neighborhood.

PLANTING.—The ground well prepared, the next thing is the planting; and for fall planting, we would recommend the fore part of September, in preference to a later period, that the plants may get well rooted for winter. A wet time is preferable, and if the plants are handy by, they should be removed with a trowel, and with a sufficient quantity of earth to keep them green and growing. If the plants are brought from a distance, which will usually be the case, they ought to have their roots nicely *puddled*, which is nothing more than dipping them in thin liquid mud. Select young and thrifty plants instead of old ones. In planting for garden culture, about one foot apart in the row, and the rows about two feet apart, is a fair distance. But for field planting, where there is plenty of land, it is better to make the rows three feet apart, so that they can be worked with a cultivator.

Work the ground level, and insert the plants carefully, but firmly, in the soil; and wet them well to imbed them thoroughly. Unless it is very wet or moist weather, it will be indispensable in fall planting, to cover the plants with a thin coating of old straw, sufficient to shield them from the sun, and to keep them entirely moist. They should be well watered every evening, if necessary, to keep them thus moist.

Any neglect in thus mulching and watering, will guarantee a certain failure in fall planting, unless in a remarkably wet season. But if the mulching and watering are properly attended to, for two or three weeks, they are sure to grow and root well and be ready for the winter. Plants put out early in the spring will usually thrive well without mulching or watering. The fall set bed

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needs no further attention after the plants are well started, to grow until the approach of winter, when it is necessary to cover them with old soggy straw, which, as soon as it is snowed over, should be carefully trod down, to prevent the mice from harboring under it.

When spring has fairly come, and the frost is out, then rake off the dressing, and the plants will soon come forth. After this nothing further is necessary than to keep the ground clean and mellow—being careful not to disturb it too near the plants, so deep as to injure the roots, which are numerous and near the surface. And before the season for regulating the runners, we will refer to the subject again, and fully explain the minutiæ of summer cultivation.

Proper regard must be had to the sexes of strawberries, and in order to have it the better understood, we here introduce cuts to fully explain it.

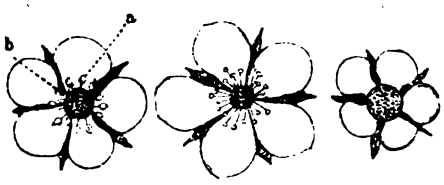

Fig. 1. Fig. 2. Fig 3.

Fig. 1. A perfect flower furnished with stamens and pistils. *a*, the stamens. *b*, the pistils, hermaphrodite.

Fig. 2. A staminate or male flower.

Fig. 3. A pistillate or female flower.

The following analysis of the strawberry we take from Pardee on Strawbery Culture:

THE PLANT.

Potash	38.65
Lime	12.20
Silica	2.58
Perphosphate of Iron	8.65
Magnesia	5.85
Phosphoric Acid	15.58
Chlorine	1.23
Soda	9.27
Organic Matter, Loss, &c.	5.99
39 per cent. of Ash.	100.00

THE FRUIT.

Potash	21.07
Lime	14.20
Soda	27.01
Silica	12.05
Perphosphate of Iron	11.15
Phosphoric Acid	8.59
Sulphuric Acid	3.15
Chlorine	2.78
Magnesia	Trace
41 per cent. of Ash.	100.00

For the Farmer.

FRUIT TREES.

Messrs. Editors—Wisconsin farmers have had high anticipations for the last few years, in fruit growing. Their prospects have been such as would seem to warrant high expectations, consequently their hopes were reasonable, notwithstanding disappointment followed. Have they expected too much, or forgotten that uncertainty not only has a name in Webster, but exists with us in view of the future? For the last six years, the farmers of Wisconsin have done much to change the scenery of this country, by entering into the praise-worthy business of transplanting fruit trees. The apple, plum and cherry have been successfully cultivated. Hope has seemed to warm the very hearts of the workmen; they seemed happy in anticipation of the golden harvest yet to come. They in a measure saw the fruits of their labors, and were satisfied. Nowhere have trees flourished better for the last few years than in this State. But, alas! the frigid blasts and scorching frosts of '56 swept over the land—the snows came not to cover and protect vegetation—and winter was winter here indeed. Spring came at last, bringing with it the sad effects of icy winter. Peach trees went by the board generally, but of them we had little to expect; many plum and cherry trees did not make a start; some apple trees that had already began to leave out, died. That was indeed a time of sour looks; many said they were almost disheartened—sick of trying to raise fruit; some were for going to Kansas, others south; some declared this to be no fruit country—and all on account of the hard nip of last winter. Where did they *not* have a severe winter? It is true that many of our orchards show the effects of the severe winter; but who among us *will* forget the worthy old motto, "Try again," and not transplant again? Not one, I most earnestly hope. Stick in the apple trees; "never give it up so." Show yourselves worthy of better times. There is a battle to be fought in November, and if we can not withstand one such charge as

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this, where shall we be found in that great day? Let us ever remember the motto, *try again!*

Two years ago this spring I plowed and sowed to wheat a piece of land which I intended for an orchard; and before harrowing the second time, I seeded it with clover. I then set my trees, (which were native,) numbering about forty, upon this land, after which I put to each tree about a wheel-barrow load of chip manure, spreading it so as to cover a space of about six feet in diameter—making the tree the center. This kept the wheat from the roots of the tree, and also caused the soil to retain its moisture. The trees during the summer made a fair growth. Last year I washed the trees with strong suds two or three times. The trees made a good but not a rapid growth. Now, whether it was on account of the fall coating of clover, or in consequence of the gradual growth of the trees during the summer, I am unable to say, but, whether the one or the other, I am induced to think that the seeding of the land had the effect to protect the trees. Suffice it to say that the trees are all alive that were last fall, and doing well, excepting two that were killed—their roots being covered with water and ice during the winter and spring.

Last spring I set out some over a hundred fine apple trees, upon a piece of land in good condition. I planted the land to potatoes. The trees grew well, all living but four I think. Early this spring, on examination, I found three or four that seemed badly injured, but not past hopes of recovery. They ceased to be living things, however, and *since*, five or six more have gone to the shades, and all I could say in this matter (had I not sold out) is, that next spring these vacant places must be filled, both rank and file, with others.

I have made some observations this spring, and I find it almost invariably the case that, where orchards have been seeded down to grass, or where the least attention has been given to the enriching of the soil and nursing of the trees, there we find the least number killed. It seems that many trees have been forced too much in their second growth—have become too tender to bear up under the blasts of a winter like that of 1856. Let us not be discouraged, but let those who have lost trees become wiser by the lesson, and transplant twofold more the coming spring. Let us select our trees from some good nursery in our own State, and let the Eastern tree peddlers do something which will be of more service to their country. O. P. D.

PALMYRA, Wis.

FRUIT CULTURE—PIERCE COUNTY.

BY D. B. BAILEY.

The cultivation of fruit is yet in a state of infancy; it is just beginning to assume the character its merits deserve. Probably more trees have been raised, more orchards planted, within the past ten or twelve years than in all previous time. Within a few years past it has received an unusual degree of attention. Plantations of all sorts, orchards, gardens and nurseries, have increased in number and extent to a degree quite unprecedented; not in *one* section or locality, but from the extreme north to the southern limits of the fruit growing region. Horticultural societies have been organized in all parts, while exhibitions, and national, state and local conventions of fruit growers have been held to discuss the merits of fruits, and other kindred topics, until it has become the desire of almost every man, whether he live in town or country, to enjoy fine fruits, to provide them for his family, and, if possible, to cultivate the trees in his own garden with his own hands. Hence, it is one of the many eager questions asked by those who contemplate emigrating to this northern country—can we raise fruit? is the soil and climate adapted to the chltivation of fruit? My present purpose is to answer some of those questions. Although I have not time to enter into details, or ability to treat the subject as its merits deserve, yet I will offer a few general remarks founded mostly on my own observation and experience.

I will commence by saying, I know of no country in the same degree of latitude, (unless it is Oregon,) better adapted to the cultivation of all the hardy kinds of fruit, than northwestern Wisconsin, or more particular, Pierce county. Our winters are far less changable than they are further south; after the cold weather commences, it generally remains pretty steady until spring. It is not subject to those frequent changes from freezing to thawing, which horticulturists know to be very injurious to young trees. Secondly, our soil is most admirably adapted to the climate, also to the growing of most kinds of fruit; such as every orchardist would select for planting his trees; a rich loamy soil, varying from a sandy calcareous, to a clayey loam, with a due proportion of inorganic substances, such as lime, potash,

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&c., that constitute a large portion of the ashes of the wood and bark when burned; with a sandy clayey subsoil, or a mixture of sandy clay and gravel: one that will not let the water pass off too quick, or retain it too long. On such soils we find the greatest and most enduring vigor and fertility, the healthiest and hardiest trees, and the fairest and best flavored fruits.

But in discussing the horticultural merits of any given locality, it is well if we can bring experience to sustain our position; such I shall endeavor to do, for experience after all is the only sure guide. Owing to the comparative newness of our county, there have as yet been but few trees planted; but such as were really alive when planted, and set out in a proper manner, so far as I have been able to learn, are doing well. In the spring of 1853, I procured of Mr. F. K. Phœnix of the Delevan nursery, in the southern part of this State, a lot of apple, pear, plum, and cherry trees, also quince, currant, and gooseberry bushes, grape vines, &c., &c.

Of two hundred apple trees, embracing forty different varieties, I have lost only eight or ten; and those were destroyed mostly by the gophers eating off the roots just below the surface of the ground. With the exception of ten or fifteen, they are as fine and thrifty a lot of trees as can be found anywhere; and last season (1855) they presented me with a few scattering specimens of their fruit, as if to show their gratitude for the little care and attention bestowed on them. As to pears, some of my standard trees are looking fine, some of them are dead—such cases are not unfrequent elsewhere, with many of the finer sorts of pears. My dwarf pears (those worked on the quince) all look well. Of ten varieties of plums, two or three have failed, the others are doing well. The common red pie, and morello cherries flourish well, none of the faster growing varieties, such as the Harts, Bigarreaus, and but few of the Dukes, will stand our climate as standard trees; but when worked on the Mahaleb stock, thereby dwarfing them, they seem to become quite hardy. I have both Bigarreaus and Dukes (dwarfs) that stood without protection last winter, and without losing their terminal buds. The quince is not at home here. Currants, and gooseberries, with the whole list of small fruits grow profusely. Among my different varieties of grapes, are the Clinton, Isabella and Catawba, the two last I give a slight protection in winter; all but the Isabella produced fruit last season. Mr. Isaac Holden, a gentleman who has for many years been engaged in the nursery business in Dracutt, Middlesex county, Mass., being on a visit to this country last fall, remarked that he was very much surprised to see rich clusters of the Catawba grapes fully ripened. He said they did not ripen in Massachusetts; but if the Catawba would mature here, the Isabella surely would. Thus much of my experience in fruit raising in Pierce county, Wisconsin. "If these things we know, then what shall we prophesy?" If the various kinds of fruit above mentioned, have continued to grow and flourish for three successive years, then may we not predict that trees will *grow and bear fruit*, if properly planted and cared for afterwards. And furthermore I believe—and believing I may as well give utterance—that fruit will yet be one of the principal productions of Pierce county. I will conclude this article by offering the following suggestion. In carrying trees to a colder climate, *let it be done in the spring always*, that the growth and ripening of the trees may be in accordance with its new climate, and not have a cold winter come suddenly on the luxuriant growth of a warmer climate.

For the Farmer.

NEENAH, June 25, 1856.

MESSRS. EDITORS:—Will you inform me through the FARMER, or otherwise, if you know of the experiment being tried of grafting the pear on thrifty apple seedling roots, and with what success, or give your opinion on the subject if you have no facts.

I should like to obtain a copy of the Trans- of the Wisconsin Fruit Growers Association—can you inform me where it can be obtained? THOS: COOKE.

Will some of our correspondents answer the first enquiry. We presume a copy of the Transactions of the F. G. A. can be obtained by addressing the president, CHAS. GIFFORD, Esq., Milwaukee. EDS. FARMER.

HOW TO BLOOM CAMELLIAS.—When the growth is nearly made—that is, when the leaves have expanded in the young shoots, water should be withheld, so as to allow the plants to flag but not to shrivel. This should be repeated twice. At the first flagging water them copiously, filling the pot three or four times after the water has sunk; only water them this once and let them flag as before. Care is required not to allow them to flag too long, or the leaves will be injured. This sudden check at that period, I have always found, will cause the plants to form buds; but unless they are in health, this process to set them for flower will be useless, as it would weaken them still more. I have been enabled, by these means, to cause camellias to bloom that have not flowered for three or four years. [Gardener's Chron.

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VEGETABLE PHYSIOLOGY.

PRACTICAL HINTS—NO. 3.

In previous numbers of the FARMER we have treated under the above head, of the modes of transplanting and pruning to be determined by the physiological operations of the tree or plant.

We alluded to some curious and interesting analogies between vegetatble and animal life. The parallel can be traced still farther, and other practical lessons can be derived from it. As in the animal economy, there is necessity of free exercise of limbs and functions, so is it with the vegetable creation, and the winds, so often destructive in our orchards and gardens, are necessary to vigorous and healthful growth. The more you confine a rose bush by training it up on a frame or wall, the slenderer it will grow foi lack of free motion, and it is found that espalier peaches and other trees when closely confined, very slowly increase the size of their trunks, and that the vessels for conveying the elaborated sap downward towards the roots are apt to become clogged, and thus the trees be killed. Therefore, the advantages of early ripening and sweetening the fruit are generally more than counterbalanced by the debilitating effects of the process. Hence we rarely see this mode of training practised. It is natural for vines which have tendrils or rootlets by which to attach themselves to walls and trees, to be confined at sundry points. There are also many kinds of roses which push their long limbs up through the branches of trees, and through the crevices of rocks. These may find their natures gratified by the trellis and the loop of leather.

Some curious results were produced by Mr. Knight, by some experiments on young apple trees. He staked some trees firmly to the height of three feet from the ground, in such a manner as to prevent any motion by the wind below that line, and yet not obstruct the flow of the sap. The consequence was, that the limbs of the trees grew larger above than below the point of confinement. This was from lack of exercise as in the espaliers.

The same experimentalist fastened a tree in such a manner that the north and south winds could move it, but not those from the east and west. It grew larger in the direction of its free movements in the proportion of thirteen to eleven. It is clear, then, that trees profit by exercise. It is good to support them, however, when they are first transplanted, and consequently in a somewhat feeble condition, as it is good for a lame man to use a crutch, or a sick person to recline upon a pillow.

Plants not only require exercise, but they also have their periods of rest. What the alternatives of day and night are to animals, summer and winter are to trees. It may be supposed that in the tropics, trees grow equally the year around. But it is not so. The dry season and wet season correspond with our winter and summer, not in point of time, perhaps, but in the regularity of their recurrence, and in their effects upon vegetation. The state of torpor is produced by drought as well as by extreme cold, and trees and plants are rested during a drought that they may go vigorously through the season of activity. Men who have charge of hot houses well understand this necessity of the plants' nature, and produce an artificial winter or dry season in order to induce early fruit. Strawberry plants may be exposed to drought while raised in pots and the time of their bearing changed. Plants acquire habits. It is difficult to make a shrub blossom in winter which is accustomed to blossom in summer, and vice versa. Peas that come to maturity early on account of the climate in which they are raised will continue early for several years, when planted in a severer climate. On this account, a large quantity of peas are imported yearly from France to the United States.

The study of vegetable physiology—of the characteristics of species—of the processes of reproduction—suggests many practical points in the operations of grafting, budding, hybridizing &c. These topics we leave for the future. H. F. B.

PLOWING MATCH.—A plowing match came off at the farm of Henry P. Savage, in Lisbon, Waukesha county, on the 26th ult. The prizes were awarded as follows:

James Howitt, first prize.
William Lamb, 2d do.
Andrew Howit, 3d do. [Free Dem.

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For the Farmer.

CULTURE OF THE OSAGE ORANGE.

MESSRS. EDITORS—We noticed in the FARMER for July some inquiries in reference to the culture of the Osage orange for hedging. We have received the following communication, which was published in an eastern paper, and think it will answer the inquiries satisfactorily. Mr. Pitkin called on us a short time since, and tells us the best time for planting is fall, but if more convenient, to plant in the spring. His directions were as in the communication. We are the agents for Mr. Pitkin in this vicinity, and have his seed at wholesale and retail.

Respectfully Yours,
ELDRED, BARROWS & Co.

Janesville, July 14th, 1856.

The following communication is from the pen of one of the oldest and most experienced hedge growers in the country—and will be of interest to those engaged in an enterprise destined to work such glorious results for our farmers in the west:

I procure seed in the fall. Late in November I mix it with three or four times as much fine earth and place the whole in an open box—which I set out on the north side of the house, and allow it to remain undisturbed until planting time in the spring. The earth then is sifted out, and the seed planted, being careful not to let it dry before it is covered. A friend of mine who has raised plants for many years, and who planted fifty bushels last spring, says he thinks he gets enough extra plants, to pay for the seed by freezing, over any other mode of preparation.

Seed should be procured from a responsible source—as much of it is worthless; ("Pitkin's seed" I have always found good;) yet I am satisfied that bad management on the part of the purchaser is often the cause of failure. As regards the *age* of seeds, I do not care particularly about it, providing it has been well kept. I have had it grow well three years old.

On new ground where the weeds will not be troublesome, a hedge can be made quite as soon by planting seed in the hedge row, as setting the plants. For a full year in growth is lost by transplanting. But in this case, the earth should be made mellow and fine, and the seed sown *thickly*, say 2 to the inch, which is about one bushel to two miles, as the grasshopper and other little vermin will be sure to take their share of the little tender plants. When the plants are 3 inches high or too old for insects to prey upon, they may be thinned out to a stand of about 4 inches apart. Spaces wider than this should be filled at the same time, by taking up when too thick with a small trowel. By being careful to have as much earth adhere as possible, and not to break up the little tap root, the growth is not materially retarded, and all come on together.

I have seen a fine hedge made on the open prairie by turning the sod over, say 5 furrows wide, and sowing the seed in the *lap* of two furrows, which was covered with a little earth hauled on with a hoe. The seed was put out to freeze the winter before as spoken of above. The plants came up finely and required no attention, save the thinning out and filling of vacant spaces, for the first year. This required about 3 days' work to the mile. The second year, it required 2 cuttings, one close to the ground in the spring, and the other 3 inches above, about the 1st of June. This was about one half day's work each time. The labor each year after this did not exceed 2 days work to the mile, and 4 years from the seed, was sufficient to complete it. The quantity of seed to the mile was one-half bushel. Every one can make their own estimate of cost. Many persons have supposed that the plant will not endure severe cold, It certainly has endured cold 35° below zero the past winter without injury. If I was going to the northern part of Minnesota to live on a prairie farm, I should expect to hedge it with the Osage Orange. The only difficulty is the *first winter*, and on ground that heaves badly by frost. A sure remedy for this, is to cover the ground close up, on both sides with straw, in the fall. The straw need never be removed, as it keeps the ground moist, and the weeds from growing in the summer. A better use can hardly be made with straw, than mulching hedges and fruit trees.

Can any one in middle or northern Wisconsin give us as favorable accounts of the success of the Osage Orange in their sections.

EDS. FARMER.

For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—I am now going to give some *first hand* testimony with regard to this "much vexed question" of wheat and chess. I sowed wheat after wheat last fall, and consequently there were a great many heads of wheat plowed in. Last spring I marked several places where I knew there were whole heads. They matured differently—some headed out all wheat, some all chess, and some wheat and chess together. I found wheat and chess

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heads from one root, the chess being a sprout from the wheat. So that there could be no mistake about it, I washed the root and then split them apart. The union was perfect. Where now are your theories, gentlemen? Keep agitating.

ABNER K. HATCH.

P. S. Can any one inform me where the Bee Keepers' Manual can be obtained, and the price.* A. K. H.

Addison, July 13th, 1856.

*See O. M. Saxton & Co.'s andvertisement in this number. EDS.

DANE COUNTY AGRICULTURAL SOCIETY.

MADISON, June 28, 1856.

The General Committee met at the agricultural rooms at 10, A. M. The president, Hon. P. W. Matts, in the chair.

After some discussion, in which several took part, it was resolved that a committee of three be appointed to make and publish a premium list for the forthcoming county fair, the aggregate amount of which list shall not exceed five hundred dollars.

Resolved, That the committee consist of Messrs. White, Whittlesey and Bond.

Resolved, That a committee of one be appointed to report at the next meeting, the best lot of land of five or six acres that can be obtained for the exhibition, the rent of the land and the expense of fencing and other preparations.

Resolved, That W. A. White be the committee.

Resolved, That the Secretary have 100 copies of the constitution printed and distributed to the members of the general committee, and that the general committee be requested to report new members at the meeting to be held in August.

Adjourned to meet at the same place at 10, A. M. on the second Tuesday in August.

H. F. BOND, Secretary.

FARMERS' & MECHANICS' CLUB ELECTION.

At an adjourned meeting of the Farmers' and Mechanics' Club, held at Metropolitan Hall, Whitewater, on Saturday, July 5th, at 4 o'clock, P. M., the following persons were chosen officers for the ensuing year

John M. Clarke, President.

William Stebbins, E. M. Rice, Vice Presidents.

W. K. Cash, Recording Secretary.

M. E. Congar, Corresponding Secretary.

J. L Pratt, Treasurer.

S. B. Newcomb, Chairman. Joshua Thayer, H. J. Strain, Giles Kinney, E. F. Williams, Executive Committee.

After some deliberation, the Club passed a resolution instructing the Executive Committee to procure a Charter at the extra session of our legislature, to convene in September next.

M. E. CONGAR, Secretary.

For the Farmer.

CHEAP HAY COVERS.

NORTHAMPTON, Mass., July 9.

MESSRS. EDITORS—I take the liberty of sending you the two enclosed receipts, which if you wish, you can give a place in your next number.

I have used the hay covers for six years, and have found them of great value. I think they will generally save the whole cost in less than one season.

Yours Respectfully, E. CLARK.

HAY COVERS.—Take a piece or more of yd. wide unbleached cotton sheeting that can be bought for 7 or 8 cents per yard and tack it up on the sunny side of the barn or board fence. Then prepare the following mixture, namely:—For one gallon of linseed oil add about two pounds of beeswax, to be simmered together, and when taken from the fire add about a quart of Japan. When it is cold, it shohld be about the thickness of paint. If too thin add more wax, and if too thick add more oil; then paint the cloth over on one side only, with a common paint brush, and after drying a day or two take it down and cut it into squares—then pick up stones of about six or eight ounces each, and get the females of the family to sew one into each corner, and the thing is completed. It would be an improvement to enclose the stones in a small bag and suspend them a few inches, which would be thought very little more trouble in so good a cause. No hemming the selvages is necessary. Cast iron weights of six ounces each would cost about one cent apiece, but it is doubtful whether they would answer a better purpose than stones. Every farmer should supply himself with these covers *at once*, as by and by, he will be too busy to attend to this matter. The immense losses sustained last year, by wet weather, should admonish him of its utmost importance. There is the best authority for stating that the county of Worcester alone, which produces upwards of 145,000 tons of hay annually, would have saved twenty thousand dollars last year if the farmers had been supplied with these covers. [Hampshire Gazette.

WAGON COVERS.—Take about 8 yards of Hadley Falls unbleached 5-4 sheeting which can be bought at about 13 cents per yard;

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cut it into two pieces and sew it firmly together, as for a sheet—this kind is mentioned because it is very strong and thick—then tack it up on the sunny side of the barn and paint it over with the same mixture as for the hay covers stated in your paper last week. When dry take it down and sew stones into each corner of proper weight, say about one pound or more each, and it is completed. By throwing this simple affair into his wagon on leaving home in the morning, the farmer would be able to load up his hay if he saw a shower coming, and mig t stay to help his men rake up the balance instead of driving off his horses at the top of their speed, and perhaps not reach home before he is caught in a pouring shower, and is obliged, the next day, to back his load out to dry his hay over again. One such instance would pay the cost of a cover which need not be over $1 25 to $1 50. The same cover would enable him to take his grist to the mill on rainy days, which is a great saving of time, as safely as if he owned a covered wagon. C.

Honey and the Honey Bee.—The undersigned being desirous of obtaining statistics relative to the bee culture and production of honey, in Wisconsin, would respectfully request all practical bee keepers, throughout the State, to communicate with him by mail, and inform him how many stocks they lost last winter, and how many they had on hand in the spring, the kind of hive used, together with any other information they may be able to afford respecting the bee culture.

The object of the request is to obtain authentic information relative to the present condition of practical bee-keeping, and letters addressed to the undersigned at Milwaukee, will receive proper attention. Editors of newspapers in Wisconsin may confer a favor on some of their readers by publishing the above in their respective journals.

L. Kennedy.

Milwaukee, Wis., July 1st., 1856.

To Sportsmen.—Wash your gun barrels in spirits of turpentine, by dipping a rag or sponge fastened on your gun rod into the liquid and swabbing them out two or three times, when they will be cleaned from all impurities, and can be used almost instantly, as the turpentine will evaporate and leave the barrels dry; even if they are a little moist it will not prevent their going off, like water. After being washed thus there is no danger of rust as when water is used. I am an old and experienced gunner, and have practiced this for years. [Scientific American.

Mr. E. D. Montros, of York, Dane Co., informs us that he has taken, this season, 31 fleeces from his French Merino sheep weighing 249 lbs. Who can beat it? [Col. Jour.

EDUCATIONAL.

PRACTICAL EDUCATION--THE PROGRESSIVE SCIENCES.

The following paragraphs—selected from an Inaugural Address delivered before the Board of Regents of the Wisconsin State University, by E. S. Carr, Professor of Chemistry and Natural History—contain many good suggestions on the subject of education, and not a few pleasant recommendations for the study of the natural sciences. In this address the Professor has made a very logical and interesting distinction between *inductive* and *deductive* methods of obtaining knowledge, and we hope that in making extracts we have not garbled ideas:

Education, as I understand it, consists in the full and harmonious development of the entire man, to an extent limited only by his capacity for improvement, and the means for its accomplishment. Education is thus the matter of a life; it commences with our existence and continues while we live. The objects and influences around us, and the powers within, are the educators, and the world the great university. The malaria, though intangible, no less exerts its silent and deadly influence upon our bodies, than do customs, laws and governments, climate and soil, upon the formation of character and the development of the national mind.

As the development and strengthening of our bodies require not only disciplinary exercise, but an abundant supply of the material or food out of which they are formed; so the mind, for its development, requires not mental discipline alone, (without which, like the body, it would become enfeebled,) but in addition its appropriate aliment, *knowledge*. Hence the educational or disciplinary objects of a collegiate course can only be obtained by combining with it instruction in useful knowledge.

Education, in its more limited and common acceptation, is understood to be a preparation for the duties and responsibilities of life. It consists in the healthful development of the moral, intellectual and physical being; and also in the acquisition of useful knowledge. The former of these is usually regarded as the disciplinary part of education, the latter as the instructional.

In the study of the natural sciences, we do not confine ourselves to the method of induction. Beginning with this, we have perhaps advanced only a few steps before we find the two methods interchanging. Newton watches the falling apple, traces the effect to its cause, and reads by the great law he has discovered an explanation of the

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grand phenomena which appear in whole systems of worlds. A Davy or a Faraday interrogates nature by his experiments, astonishing the world with a revelation of those great *truths* which transcend the highest efforts of imagination.

Think of the various faculties brought into exercise by the process of reasoning required to discover any natural law, or to its right understanding by our own minds. What close observation of phenomena, what acuteness of discrimination in their comparison, what exercise of reason in proving their true relations to each other, and giving them their highest expression in the form of a law! Such is the reading of one page only, of the great Book of Nature, which opens wider and wider as the world rolls on. As we turn its leaves (and our own thoughts) from the insensible line which binds things celestial and things terrestrial together; as we look through those pages written all over with the old earth's history, and follow the creative energy through realms of animal and vegetable life, everywhere we find use for the same faculties, the same processes of observation, the same humble receptiveness of the truth. Thus it is that in studying the natural sciences, while the mind is disciplined by both the logical or deductive, and the inductive *methods*, it is acquiring something better than method, feeding itself with delightful and useful knowledge, which may be turned to account at every step of after life. While such a course of study is the most disciplinary, it is also the most natural. The tendency of youth is to study nature.

Every teacher knows how essential is the enthusiasm of students, both to their improvement, and his own enjoyment of his work. To make learning pleasant as well as profitable, has long been sought as a desideratum. When I walk with students in green fields and forests, and show them in Nature's basement rooms how the foundations of the earth were laid, I see in them tokens of mental animation, which are the strongest stimulants to my own exertion.

At the same time, we have in our dealings with the natural world, in unfolding the properties of matter, tracing the laws which govern organic and inorgani nature—in quickening the powers of observation and research—provided the farmer, mechanic and manufacturer with an education suited to their needs, thus realizing the democratic idea which secures equal benefits to all classes of the community.

We have already seen how the natural sciences, by their method in developing and strengthening the mental powers, accomplish one great object of education, viz: mental discipline; and that in acquiring this discipline we have learned something of the plan and purposes of God as expressed in the natural world—while the future farmer or manufacturer has acquired a knowledge of the facts and principles which lie at the foundation of their pursuits. Who can doubt that a knowledge of the soil we cultivate, of food, and the sources from which it is obtained, together with all those conditions which the plant requires for its successful cultivation, would make the pursuit of farming not only more productive, but more attractive?—or that an intimate knowledge of the *nature* of those processes concerned in manufacturing operations, would enable the operator better to control and govern them, and to secure more advantageous results?

To accomplish these objects, our institutions should give thorough and efficient instructions in Chemistry and its relations to agriculture, manufactures, the culinary and other useful arts—Geology and Mineralogy, and their relations to mining—Botany and Zoology, considered especially in reference to plants and animals useful or injurious to man. Such a course could not fail to produce an increased interest on the part of students, while preparing them in the best manner for industrial pursuits. Human power would thus be increased, time economized, while the sons of industry would themselves become disciples of science.

One of the greatest advantages of natural science, is its *freedom from limitations*. To it, none can say, "thus far canst thou go, and no farther."

Studies which are full of the idea of progress are needed to counteract the influence of those in which the mind rests upon external authority. "Truth," says Milton, "is compared in Scripture to a streaming fountain, if her waters flow not in perpetual progression, they sicken to a muddy pool of conformity and tradition." China furnishes an instructive example of a nation whose whole existence is a deference to authority, whose only education, a digging over the dry carcasses of old forms of thought.

The great difference between classical and scientific education is, that while one is passive, relying upon and unquestionably receiving everything from authority, the other is ever questioning, active, creative, and therefore necessarily progressive.

You may take up any branch of scientific investigation, and carry it legitimately forward, and ere you are aware, it projects your thought out of and beyond yourself, your day and generation, and while dealing only with the actual, you yet breathe an atmosphere of fairest possibilities.

The world has two classes of individuals—those who prowl, and those who produce.

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FEMALE EDUCATION.

"She has finished her education," said a friend. "Finished her education?" said we, just as though a young lady's education was a stocking, or rather a bonnet, and now it was to be placed in a band-box, to be displayed to visitors, and to be worn only on set occasions. We protest against the doing up and finishing off a young lady's education with her teens, just at the time when she begins, if ever she does begin, to *think*. A young man has just acquired at one and twenty the elements of education, and is prepared to study advantageously according to his own discretion; but a young lady has done—finished—the circle of her sciences is complete, and she is ready for any station in life that may be thrown in her way. Now why, in the name of common sense, may not a woman think? and if she think, why may she not study and acquire profitable food for thought? There is a lady, for instance, that "finished her education" by having peculiarly good advantages at an early age. She is now a wife and the mother of six children. She plays well upon the piano, sings sweetly—but her husband must, and actually does, put all the children to bed, and has the care of them through the night; and as for her table, the bread is perfectly execrable to one who has visited his grand mother's pantry; and the coffee—Oh! her coffee; it would cost her nothing less than her head if it reached the Grand Turk's palace—and yet for all this, the lady has a "finished education!"

DOES THE MOON ROTATE ON ITS AXIS?

Since we published a short article, stating that the commonly accepted theory of the moon rotating on its axis once in 28 days, was disputed in England by J. Simonds, Inspector of Schools, and others, we have received a number of communications with diagrams to illustrate how it does rotate once in the time specified. All these communications prove exactly what their authors intend they should, but they are not proper answers to the question in dispute. By the moon rotating on her axis once during her siderial revolution round the earth, she must present the same face to one fixed point of the earth, but not the same face to every portion of the earth. It is asserted by those who dispute the axial rotation of the moon, that, like the ball of a governor on the steam engine, continually revolving, but not rotating, and showing the same face to its shaft, so the moon always shows the same face to every part of the earth. Is this so? That is the question. It can easily be determined by observation at different points of the earth's surface. If photographs were taken of the moon's disk in England and America, and compared together and examined by a microscope, the dispute, we conceive, would soon be settled. In the meantime those who deny the moon's rotation, assert that the theory of its rotation in about 28 days, was invented to account for seeing the same face of the moon, from only one fixed point of the earth, and that in Europe.

Every observer of the moon has noticed that it always presents—very nearly—the same face towards us. This is accounted for by allowing her to make but one rotation on her axis, during her single revolution round the earth. But these periods are not exactly equal, for the time of the moon's revolution, is subject to small irregularities, whereby we sometimes see a little more of one of its edges than usual, either on the eastern or western sides of her equatorial regions. This is called the moon's *libration*, and is also claimed by those who dispute her axial rotation, as favorable to their view of the question. It would be an anomaly, however, in the motions of the bodies in our solar system if the moon possessed no axial rotation; therefore reasoning *a priori*, we would conclude it had such a motion. Deductions, however, must never be allowed to stand for facts in science, the soul of which is, correct observation.

[Scientific American.

PLASTER OF PARIS.

In its natural state this is a salt of lime, known by the name of gypsum, and is largely diffused throughout the world. Its constituent parts are lime and sulphuric acid. When calcined it is converted into plaster of paris. In fine powder, when mixed with water, it becomes heated, and will harden to a solid mass; it is therefore, much used for potter's molds, images, and medalions. Its combining proportion of water is 27 per cent., and it is its property of suddenly hardening when mixed with water, which makes it so valuable for casting. It is a good non-conductor, hence it makes a good plaster for the interior of buildings, and for the filling of fire-proof safes. It is applied in large quantities to meadow and grass lands in a ttate of powder. The gypsum is simply ground up in mills, and sold to the farmers in this state. Placed in sinks it absorbs ammonical vapors, and is thus a dedoizer; therefore, it is very useful in many places in cities during hot weather, thus to apply it. Common slaked lime is cheaper and much used for this purpose, but is not so good.

WITTICISMS are the condiments and luxuries with which to serve up TRUTH for the palate of Fancy. Judgment prefers that substantial element unadulterated and natural, because it is then most wholesome.

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MECHANICAL.

STEAM WHISTLE FOR LOCOMOTIVES.

James Harrison, Jr., formerly of Milwaukee, Wisconsin, now of New York city, has invented a new steam whistle. The steam whistle has come to be regarded on nearly all our railroads, as the most effective and reliable signal of warning that can be adopted. Its invariable use is required by law in some States, not to mention the regulations of railroad companies. It is the engineer's duty to sound the whistle at every crossing, curve, bridge, &c.; but he has a great variety of other duties to perform connected with the guidance and control of the engine, fire, &c., which renders it almost impossible for him always to open the whistle at the exact moment or spot or for the proper length of time; yet safety requires that the alarm should always be sounded with unerring precision and certainty. The late terrible accident in New Jersey, on the Camden and Amboy road is an instance in point; many other examples, less fatal to life, but highly destructive to property could be named.

Mr. Harrison's improvement consists in an attachment to the locomotive which is intended to sound the whistle at the proper moment and spot independent of the engineer. It is a sort of mechanical watchman, always on the look out, never asleep, attention never for an instant diverted. At every crossing, bridge, curve station, approach, locality of danger, or other desired point, it sounds the alarm, and keeps up the shriek as long as needed, with a surety that it would be difficult to improve. Indeed, it is a part of the locomotive; so sure as the engine moves will the whistle be blown. The inventor provides a cylinder upon the periphery of which is a screw thread, furnished with a series of adjustable stops. The cylinder is rotated by connection with one of the truck wheels of the locomotive. The stops are arranged so as to come in contact with and lift the opening lever of the whistle. By adjusting the stops at the proper distances on the cylinder the whistle will always be sounded at the proper time and place, whether the locomotive be running forward or backward. This invention strikes us as being one of a very valuable nature. [Germantown Telegraph.

MANUFACTURE OF ALUM.

Peter Spence, chemist of Manchester, England, has secured a patent for obtaining liquor or cake alum by a new process. He takes China clay, and breaks it into small pieces about the size of beans, and places them on a false bottom in a vessel lined with lead. The clay is now covered for about twenty-four hours with water impregnated with sulphurous acid gas, mixed with 1 per cent. of sulphurous acid, and slightly heated. This dissolves the iron out of the clay. The clear liquor is now run off, and the clay retained is again covered with pure water, which after standing six hours, is also run off. Diluted sulphuric acid is then added, heat applied, and the liquor brought up to 240° Fah., and kept at that until the sulphuric acid is saturated with alumnia: this requires about forty-eight hours to accomplish. The solution is then run off in leaden coolers, where the alum concretes into cakes. [Scientific American.

AN AMERICAN PRINTING PRESS IN LONDON.

One of Hoe's celebrated six-cylinder printing presses—with experienced workmen to superintend it—was sent from this city by the Ericsson, on the 10th inst. It is to be used for printing Lloyd's Weekly Newspaper, in London. This is a large first class weekly journal, having a circulation of 140,000 copies. The time was when we used to import our printing presses from London, but the tables have turned in our favor, and we are paying back our debt with compound interest. [Scientific American.

STATE SHOWS, 1856.

Wisconsin,	Milwaukee,	October 8—10.
Tennessee,	Nashville,	June 4, 5.
Ken. Ag. & mech,	Lexington,	September 9—12.
New Jersey,	Newark,	September 9—12.
Vermont,	Burlington,	September 9—12.
Canada East,	Three Rivers,	September 16—18
Virginia,	Wheeling Island,	September 17—19
Ohio,	Cleveland	Sept. 23, 24, 25, 26.
Canada West,	Kingston,	September 23—26
Am. Pom. So'y,	Rochester,	September 24—30.
Michigan,	Detroit,	Sept. 30 & Oct. 1,2,3.
New York,	Watertown,	Sept. 30 & Oct. 1,2,3.
Illinois,	Alton,	Sept. 30 & Oct. 1,2,3.
Pennsylvania	Pittsburgh,	Sept. 30 to Oct. 2.
Kentucky,	Paris,	Sept. 30 to Oct. 5.
Nat'n'l Ag. Show,	Philadelphia	October 7.
California,	San Jose,	October 7, 8, 9.
North Kentucky,	Florence,	October 7—11.
New Hampshire,		October 8, 9, 10.
Iowa,	Muscatine,	October 8—10.
North Carolina,	Raleigh,	October 14—17.
Georgia,	Atalanta,	October 20—25.
Indiana,	Indianapolis,	October 20—25.
Maine,		October 28—30.
Alabama,	Montgomery,	November 11—14.

AMERICAN PRIZES AT THE PARIS EXHIBITION.—The Paris correspondent of the Commercial Advertiser says the United States drew prizes at the great Agricultural Exhibition for every article that was presented for serious competition, numbering five. Pitt's Buffalo Threshing machine drew a first class medal, and was sold to the Emperor for 2,200 francs; Manny's Reaper drew a first class medal; a barrel of Col. Alston's South Carolina rice, do.; McCormick's Reaper, worked by Frenchmen, a second class medal.

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MISCELLANEOUS.

A COTTAGE SCENE.

BY MRS. SIGOURNEY.

I saw a cradle at a cottage door,
Where the fair mother, with her cheerful wheel,
Carolled so sweet a song, that the young bird
Which, timid, near the threshold sought for seed,
Paused on his lifted foot, and raised his head
As if to listen. The rejoicing bees
Nestled in throngs amid the woodbine cups
That o'er the lattice clustered. A clear stream
Came leaping from its sylvan height, and poured
Music upon the pebbles; and the winds,
Which gently 'mid the vernal branches played
Their idle freaks, brought show'ring blossoms down,
Surfeiting earth with sweetness. Sad I came
From weary commerce with the heartless world;
But, when I felt upon my withered cheek
My mother Nature's breath, and heard the tramp
Of those gay insects at their honeyed toil'
Shining like winged jewelry, and drank
The healthful odor of the flow'ring trees
And bright-eyed violets—but, most of all,
When I beheld mild slumb'ring innocence,
And on that young maternal brow the smile
Of those affections which do purify
And renovate the soul—I turned me back
In gladness, and with added strength, to run
My weary race, lifting a thankful prayer
To Him who showed me some bright teint of heaven
Here on the earth, that I might safer walk,
And firmer combat sin, and surer rise
From earth to heaven.

For the Farmer.

HARSH WORDS.

It is a source of great pain to see a man so regardless of domestic enjoyment, as to embitter the existence of his life companion by harsh words; to cause her to shed tears over unkind expressions, which may have escaped his lips in an unguarded moment. They are, however, none the more pardonable because uttered thoughtlessly; for they serve to diminish the felicities of wedlock as materially as though they were intentional. Smiles of approval and true expressions of tenderness—if the heart is right—cost nothing, but are themselves the price of incalculable enjoyment. Where is the man who appreciates the comforts of a home, and the cheering influence of a woman's love, who would willingly and deliberately sacrifice them both for the gratification of a moment's petulance? And yet, how often is this sacrifice made, without fore-thought and regardless of that earnest and outgushing affection which woman alone can bestow! The tender buds of confidence are but too frequently blasted by indiscriminate expressions of displeasure, and unhappy years have widened the dark chasm between hearts alienated by the rule of one angry impulse—the utterance of one harsh word. He who does not value the virtues of a warm-hearted companion—whose heart never throbs sympathetically with hers—who never spends his leisure from business in the family circle, in pleasant intercourse with kindred spirits gathered there—forgets the sacred marriage vow, violates the holy compact, and perjures his soul before the Angel of the Record. He permits the finer sensibilities of his nature to become so blunted by contact with the world as to prevent him from enjoying the comforts of life, also; and discontent and gloom envelope the higher faculties of his mind. Should death enter his household, and remove from earth the one who gave him her affections so trustingly in the morn of youth, what regrets would rise up from the grave to accuse him of neglect and cruelty, and how bitterly would he reflect upon the happiness he had spurned as a beggar from the door of his heart. Let no man forget the true saying, "Much of our sorrow for the dead springs from our neglect of the living, and many a heart is made desolate by harsh words." C.

AGE.

But few men die of age. Almost all die of disappointment, passional, mental, or bodily toil, or accident. The passions kill men sometimes, even suddenly. The common expression, choked with passion, has little exaggeration in it; for even though not suddenly fatal, strong passions shorten life. Strong-bodied men often die young—weak men live longer than the strong, for the strong use their strength, and the weak have none to use. The latter take care of themselves; the former do not. As it is with the body, so it is with the mind and temper. The strong are apt to break, or, like the candle, to run; the weak burn out. The inferior animals, which live, in general, regular and temperate lives, have generally their prescribed term of years. The horse lives twenty-five years; the ox fifteen or twenty; the lion about twenty; the dog ten or twelve; the rabit eight; the guinea-pig six or seven years. These numbers all bear a similar proportion to the time the animal takes to grow to its full size. But man, of all the animals, is one that seldom comes up to his average. He ought to live a hundred years, according to this physiological law, for five times twenty are one hundred; but instead of that he scarcely reaches, on the average, four times his growing period; the cat six times; and the rabbit even eight times the standard of measurement. The reason is obvious—man is not only the most irregular and the most intemperate, but the most laborious and hard-worked of all ani-

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mals. He is also the most irritable of all animals; and there is reason to believe, tho' we cannot tell what an animal secretly feels, that, more than any other animal, man cherishes wrath to keep it warm, and consumes himself with the fire of his own secret reflections." [Blackwood.

AN OSSIFIED MAN.

In a quiet little village on the Western Reserve, in Ohio, there lives a man who, physiologically considered, is certainly one of the wonders of the world. His joints are completely ossified, (turned to bone,) and he is not capable of making the slightest movement, except alternately opening and shutting two fingers of his right hand. His body is as rigid as iron, and it couldn't be bent backward or forward, without breaking some of his bones. This singular process of ossification has been going on in his system for more than twenty years. He is now about forty-six years old, and has not had the use of his limbs so that he could walk since he was nineteen. Ossification commenced first in his ankle joints, gradually extending itself through his system until he w s entirely helpless. At first he moved about by lifting himself with his hands, but when about twenty-one years old he lost the use of his arms and was left entirely helpless; since that time he has been entirely under his mother's care, and she watches over him with an anxiety that only a mother can feel. When about twenty-six years old he became entirely blind from some unknown cause, and has remained so ever since. At about thirty he suffered greatly from the toothache, and finally he had them nearly all extracted. A year or two afterward, his finger and toe nails all came off, and were supplied by others growing out from his fingers and toes at right angles, and presenting the appearance of horns. What is still more singular with regard to his nails, if the end of the nail is cut off it will bleed freely.

Such is the condition of this remarkable man at the present time. He has been visited by a great number of scientific men, from all parts of the world, but all have failed to give any plausible reason of the cause of his transformation from flesh to bone. Singular as it may appear, although his jaw bone is firmly set in his head, he not only talks freely but fluently converses with his friends and those who visit him, on all ordinary topics of the day, and he shows himself well informed and of good mind. He is always cheerful, appears contented and happy, and it seems probable he will live for many years to come.

[HILLIER, in Prescott Transcript.

AFFECTIONS must be led—not driven.

A TRIP DOWN EAST.

CALLS UPON OUR PROFESSIONAL BRETHREN.

A comfortable night ride upon a lake boat brought us with the light of the morning to the bustling, rattling, driving, and wide awake city of Chicago. The ungained embryo of the to be great city of the Northwest.

By dint of good luck, and some little experience in traveling, we contrived to run the gauntlet of noisy coachmen, and hotel sharks, without the loss of anything more than a reasonable fee, for a ride to the depot of the Southern Railroad.

When will our western cities adopt civilized regulations, so that the passing traveller can feel safe, and be decently used by paying for it?

At six o'clock, A. M., away flies the express train over marsh and moor, over prairie and plain, the eastern breadth of Illinois is soon passed, and Indiana with its rich lands and fine farms, next spreads its beautiful panorama to the eye, appearing and disappearing, like the enchantment of a dream.

A few stops and starts at its thriving villages and Indiana is no more.

Michigan now takes up the line of march, with but a slight variation of the scene. Rather a poorer and lighter soil, and perchance a little more shabby in the appearance of its villages.

White Pigeon affords a hasty scrambling chance for a poorish dinner, eaten under a constant apprehension of being left by the cars, as the locomotive keeps a constant hooting and tooting, seemingly to disquiet and alarm all untraveled passengers as much as possible.

Dinner over, another whisk takes us out of Michigan, and lands us in Toledo, Ohio, a thriving and civil modern town; another and better dinner eaten, and we are again on the road to Cleveland.

The country traversed between these points is much of it heavy timbered, and as a whole, appears newer and wilder than many portions of the far west, that have not been settled one fourth as long.

Cleveland is reached at seven o'clock, P. M., and thus, in less than a day, on the wings of steam, we have sped over five

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hundred miles, and in and through five different states. Not long since, this would have seemed miraculous, but now it is an every day affair.

The Forest City as Cleveland is called, is a beautiful town. It has a shabby shank end about the river and lake; but Superior is as capacious and fine a business street as can be found in the west. Then Euclid st. and in fact all the upper part of the city on both sides of the river and its surroundings—where is there a more charming place? It is the fairest gem of a rich young State, and already abounds in the choicest fruits, and an abundance of all that makes life pleasant and happy.

Our friend Brown of the Ohio Farmer gave us a hearty welcome to his neat and pleasant sanctum, and we found him just what we had anticipated from a prior reading of the Farmer—a gentleman of the true stamp, and heartily devoted to his high and noble calling. The Ohio Farmer, considering its high character and central national position, ought to have a circulation of 25,000 at least.

But good bye to C., with its strawberries and cream, and good friends. Another six hundred miles ride, of a little over twenty hours, down by the city of pea nuts (where we condescended to eat a good dinner, notwithstanding all the sins of the people in the rail road wars; Like most conscientious people, we did not like to loose our dinner on an abstract principle,) down the long, tortuous giddy Erie road to New York, the great focus of all things on this continent.

Well, New York is a great town indeed, in all things, however viewed, both in extent, magnificence, activity, trade and commerce.

Here nearly a million people of all kinds, from the highest to the lowest, swarm and jostle each other from day to day on a few acres of land, and contrive by all manner of shifts and turns to live, under a most unnatural pressure; but we suppose it is nothing when one is used to it. We doubt, however, if the brown stone palaces of the Fifth avenue, afford their inmates any greater pleasure than the neat log cottage of the great west, or whether any more useful citizens will be raised in them.

New York is the greatest focus of agricultural literature in America. The extensive publishing house of C. M. Saxton & Co. turns out nearly a hundred agricultural, horticultural and other kindred works all of the choicest kind. Among periodicals, The American Agriculturist, The Plow, Loom and Anvil, The Working Farmer, The Scientific American, issue weekly and monthly from the press. They are among the sterling works of the country, and indispensible to those who would be well read in their line of knowledge. We shall refer more particularly to some of them hereafter, and to their able editorial corps, for whose many civilities we feel largely indebted.

The Crystal Palace is a stupendous but at present empty building, except a few specimens of machinery, or statuary—mere wrecks and remnants of its former splendor. What a pity that a nation as utilitarian as America, should not take hold of so fine an opportunity for collecting and making up a great national museum of everything rare and curious, but more especially useful things, here under one roof—a place where the student of invention, of art, of skill in everything that pertains to human progress, can come and see what is already accomplished, and what yet remains to be done—where the engineer, the farmer, the user of labor saving implements and machinery, can come and make his own comparisons, and intelligent selections—where the products of the soil, cereal, vegetable, textile and metallic, in their native state, may be compared and studied—where the fabrics of the loom and the handicraftsman of every kind, may be seen side and side. In a word, where the interested, the artistic, the tasteful and the curious, could all come as often as convenient, and gratify their curiosity or post up their stock of information.

What could be more interesting or useful as a school for grown up children. It would infinitely more than pay the cost, which would hardly be a penny apiece to the whole nation.

The Crystal Palace ought to be adopted as the great and permanent show room of the American people; it is just right for the purpose, and the purpose is just right for the times.

To escape the turmoil and hazard of a

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Fourth of July in New York, which from some past experience we consider as dangerous as a regular siege; in company with one of the best of traveling friends, we slipped down to Boston, to see how things were down among the Puritans on such occasions.

Boston, as usual, was neat as a parlor, and up and dressed for the occasion. A display of the military—a pretty well spiced Free Soil oration at Tremont Temple—a few patriotic airs, winding up with Hail Columbia, sung by a choir of several hundred pretty school girls dressed in white—a procession march to Old Fanuel Hall, and a good ducking in a shower by the way; succeeded by a splendid dinner and patriotic toasts in abundance, in the old cradle of liberty; where the patriots from the days of the revolution down to the present, look down from their canvass height, surmounted by the granite face and towering form of Webster, in the act of vindicating Massachusetts against Hayne, made up the programme for the day. A balloon ascension on the Common in the evening, witnessed by perhaps forty acres of people in solid mass, followed by a pyrotechnic display of artificial lightning on a liberal scale, wound up the occasion in good *old* New England style.

The Fourth over, one of the next most attractive points to an agriculturist, was the extensive agricultural warehouse of Nourse, Mason & Co., at Quincy Hall—a perfect museum in itself, being almost as large as a western eighty acre lot, and well filled with everything that could be thought of, from a reaper and mower to a Shanghai weather vane; and all of the finest model. Their machinery is on almost every farm in America, and needs no praise from us. The same hall is the sanctum of the New England Farmer, that most sterling of American farm journals. Its worthy editor, the Hon. Simon Brown, was at his post and made our stay of an hour or so both agreeable and profitable. The New England Farmer is worthy of a wide circulation throughout all the Northern and Western States.

Albany was the next point of interest on our journey. A call on the American mentor of Agriculture, the Hon. B. P. Johnson, Secretary of the State Agricultural Society, at the new Agricultural buildings was especially agreeable. The worthy Secretary has labored for a long series of years to awaken a proper interest in his great State to its leading interest, Agriculture. How well he has succeeded is a matter of history. Their State Fairs have been among the most successful in the country, and their State Agricultural building, just completed, at an expense of about $50,000, with the extensive and various museum of implements, seeds and products, being collected in its spacious halls under the care and management of Mr. Johnson, is a great credit to the State and to him. A few years hence, and it will be one of the most interesting collections for the practical man in the nation.

Another of the time honored and unostentatious workers who has made his mark upon the Agricultural face of the Empire State, is near at hand, in the person of Luther Tucker, Esq., the indefatigable editor and publisher of the Country Gentleman and Cultivator. His labors have been long, varied and useful, and to all appearances still continue as persevering as ever. He holds to the doctrine that to make a good paper, one needs to give the subject their thorough and ceaseless attention.

The Country Gentleman is an ample proof of the correctness, both of his theory and practice. We have been a reader of it from its commencement, and mean to be till one or the other of us comes to a conclusion, and that day, we hope, is yet afar off.

Well, we are again faced towards home, and this long rambling screed must come to an end. Perhaps it were better that it had not had a beginning; but we felt that we hardly ought to take such a turn about, and among so many of our senior brother laborers in the great Agricultural vineyard, without at least a passing notice; and the space that we can allot to such an article admits of nothing more. Some time when more at leisure, we shall be happy to pursue many a lead which now we only had time to enter upon, to prosecute many an agreeable acquaintance now only begun.

Alas for the present, it always finds us in a hurry—the future is the only period that promises large—may some of its hopeful anticipations be realized.

As the rapidly rolling wheels speed us on from stage to stage and from state to state,

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we cannot but perceive that we are hastening from an old to a new country. It reminds us of a period some twenty years ago, when but a grown up boy, with a new wed traveling partner, and a stout heart for a fortune, we bade farewell to the homes and friends of our childhood, and faced towards the far off, and then almost unknown west; impelled by what, or whither, we knew not, but trusting to our lucky star, which, thanks to Providence, guided us aright, and after a four weeks voyage by canal and lake, instead of two days, as at the present, we landed amid the wild forests of our then new territory. Great indeed have been the changes in the modes of travel as well as in the condition of our chosen country. We have struck some hard though humble blows to forward its progress, and hope to many more before our labors close.

For the Farmer

POTATO ROT.

Messrs. Editors—The June Farmer did not reach me and I did not see your suggestion as to furnishing a line on the subject of *potato rot* for the July No., or I should perhaps have complied—but it is time enough yet.

I would have communicated, for publication, some years ago, the result of my observations upon the *potato disease*, had it not been that there were so many *theories* published, and before the world before I found out satisfactorily the real cause, that I thought any new statements would be set down as worthless, along with all the others. I presume that I had read more than a score of reasons assigned, without any apparent doubt on the part of those who assigned them, for the *rot*, and every one of them purely conjectural—not one of the writers having watched the potato carefully through the process of decay.

My observations and experiments were made in the State of New York, from the year 1844 to '48 inclusive.

Let me then state first distinctly that the *cause of the rot is a fly* much resembling in size, color, and form what is called in Southern Wisconsin "the *chinch bug*," (which, by the way, is a *fly* and not a bug.) The *potato fly*, however, different from the other, does not make its appearance till fully grown and it is very shy. One might pass through the field every hour in the day, and unless he were looking for something with cunning sharpness he would not see them. Upon the approach of a person within eight or ten feet of them, they either conceal themselves under the leaves, or drop on the ground and cover themselves in the dirt. And yet by approaching them stealthily, I have seen them, times out of number, hanging in clusters from the potato tops, like bees in warm weather or before swarming. When they are once on the potatoes in such numbers, the crop is an entire failure. They seem to have quite a choice of certain varieties. The more succulent the top the more numerous the fly. I raised one variety of potato that was never disturbed when in the vicinity of the *Pink eye* or *Meshannock*, and it never rotted when so situated. But the same kind when I tried them entirely by themselves were attacked without mercy and rotted entirely. They were what are sometimes called *cow horns*.

Of the habits of the *fly* I have observed that from the 20th to the last of July, the "*first crop*" make their appearance—these do no damage to the potato. They are quite few, only leaving a few spots on the leaves—occasionally a dead leaf. These, I think, deposit an egg *in the ground*, from the fact that those which follow make their appearance of full size, and in vast numbers. The "*Second crop*" attack the potato from the 16th to the 24th of August (I have never known them earlier or later.) When they come in great numbers, the potato tops of an entire piece will be all killed in four days—this I have seen. I have driven them from a single stalk, and marked it, so as to make no mistake, when as yet not a leaf had begun to wither, and they had only eaten thro' the cuticle for the space of three quarters of an inch lengthwise, and eighteen inches from the ground,—in two days the stalk was dead from the wounded place to the ground—the cuticle loose, easily rubbed off with the finger—in three days the stalk completely dead and the leaves withered and black. It was perfectly plain that the decay spread from the place where the flies had bitten it, for I watched the progress, looking at it a number of times each day. The dates above mentioned answer to Western New York—I

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did not observe them here last year till their work was done.

I never succeeded in effecting any good by any experiment but once. Then, at the first appearance of the fly, I took slaked lime in a basket, and sifted it on each hill of four rows, while the dew was on, and omitted four rows. I thus limed twelve rows; and then continued the process on other rows with unleached ashes. There were forty rows, about ten rods long—one half of which were thus dressed. This operation I repeated every third day, as long as I could see any of the flies. The result was that the flies, not so numerous as they are some seasons, worked on those that were without the lime or ashes, and left those that were dressed almost entirely alone—and I had in the fall four rows of potatoes nearly all sound, and four rows alternate nearly all rotten, clear through the piece. The undressed, indeed, were not worth digging.

The next year I planted a patch of potatoes some distance from any others, and got half a dozen barrels of lime standing in it ready—intending to lime the whole of them, so as to determine whether the fly would eat them in spite of the lime when they could get no other. But I was compelled to be absent a week "just at the nick of time." No flies when I left—when I returned the tops were all dead. I prepared for them again the next year, but I watched for the fly—did not see any—used no lime—had sound potatoes. No doubt mowing off the tops, just at the right time, would save the crop.

Some of your readers are probably *so scientific* that they will be unwilling to allow the above facts to be sufficient to establish the cause of the *rot*. To any of that class let me suggest, that the tops being *killed*—the office of which being to carry off all the impure matter taken up by the fibrous roots—or the refuse of the absorption, which is carbon, or carbonic acid; this matter must remain in the root—and chiefly in those nearest the tops. The potato being unripe, and consequently growing vigorously, the effect cannot be otherwise than deleterious. If the tops were cut off and yet remained sound, a great proportion of impurity might still be carried off. And let it be remembered that the notion that the leaves and bark of plants answer in the vegetable the same office as the respiratory organs in the animal economy, is not more than *half* the truth—they also act as the excrementary ducts.

Another fact will contribute somewhat towards settling this matter: When the potatoes are ripe before the fly assails them, the tops are as hastily killed as any, but the potato is not affected. There is at least one variety, (a small early white,) that never rotted in Western New York, during the seven years that the rot prevailed there. This potato when planted at the ordinary season, has always attained its full growth by the middle of August, and generally before. I saw many acres of them from 1843 to 1850, but never knew of the least particle of *rot* in a single potato.

Please excuse this hasty article. I did intend to write at half this length, but I am no apologist. Yours truly, A. P. J.

P. S.—I ought to state that I communicated my observations to a number of persons, who also pursued similar investigations with similar success. A. P. J.

Platt Summit Farm, July, 1856.

Indian Bread.—The following recipe for making Indian bread was handed us by a young lady at Oconomowoc. From the nature of its ingredients as well as the high encomiums of those who have used it, we deem it worthy of trial by every housewife in Wisconsin.

Ingredients.—Two quarts of sweet milk, eight cups of Indian meal, four cups of flour, one cup of molasses, one teaspoonful of saleratus and one of salt; bake three hours in a slow oven. H. F.

A Recipe for Mending China.—From an English almanac we cut a recipe for mending china, a long time since, and the opportunity having occurred for trying, we found it admirable, the fracture scarcely being visible after the article was repaired. It is made: Take a very thick solution of gum arabic in water, and stir into it plaster of Paris until the mixture becomes a viscous paste. Apply it with a brush to the fractured edges, and stick them together. In three days the article cannot again be broken in the same place. The whiteness of the cement renders it doubly valuable.

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EDITOR'S TABLE.

The Crops—Wheat and Wool Market.—

The new wheat crop is being rapidly harvested and beginning to come into market. All present appearances are that the yield will be a fair one, and the quality good; perhaps if favorably secured, rather extra. This, taken in connection with the prospects of a tolerably fair price, notwithstanding all the fearful forebodings on the subject, will probably sustain the agricultural interests of the West, without faltering.

We hear more or less complaint about the chinch bug, the blight, &c., but are not led to believe that the damage is, on the whole, very extensive. Still, we think it well for observant farmers to be on the lookout for remedies against these yearly increasing pests.

The little jog of hard times that has been felt during the earlier part of the season, should operate as a caution on all prudent men and women. That other coveted eighty acres of land, which by the way, is not probably needed, had better be let alone; and that other silk dress, though "a love of a thing," had better not be bought—at any rate not on credit, unless it is absolutely needed.

Good winter wheat sold in town to-day, (July 25.) for $1.25 per bushel, and club wheat for $1.00. This certainly is not bad. When farmers can get these prices, we think they had better sell instead of holding on; we shall do so.

Wool seems to be rather holding back, for buyers. We sold our own immediately after shearing—some 3,000 lbs—at 38 to 40 cts., depending on quality, except a few coarse fleeces at 30 cts. The whole lot would have averaged full two cents per pound more if it had been better prepared for the market. We think that wool is bound to bring a good fair price, for some time to come; especially as the prices of woolen goods seem firm, and some qualities rising. We quote from the market report of the New York Tribune of July 22d:

"Wool.—Domestic fleece wool is in good demand, and prices remain firm. We quote the range from 30 to 50c for common to fine, and 55 to 62½c for super extra. Pulled wool is also in steady request, and the stock of old is almost exhausted; prices are firmly maintained. Foreign is in moderate demand, and the rates are lower.

To Exchanges.—

We wish to keep a file of all Wisconsin papers, and therefore request that our exchanges send to us regularly to enable us to make our bound volumes the more complete.

Janesville Aaricultural Warehouse & Seed Store.—

The establishment of a general Agricultural Warehouse at this point, where the farmers of Southern Wisconsin could be supplied with all desirable farm implements and seeds of every variety, has long been a crying need. Eldred Barrows & Co. have now such an establishment, as we are glad to notice and inform our readers. We visited it a few weeks since and found that their ware-rooms contained nearly everything required by the enterprising western farmer. In a letter recently received from them they say: "We have just received large invoices of goods from the east, of everything in our line, which gives us a stock three times as large as when you were here." See their advertisement on the second page of the cover.

Phonetics.—

A friend at Green Bay, Wis., adds by way of postscript to a business letter, his impressions of the phonetic mode of spelling, in this wise:

"Don't have anything to do with humbugs—especially the phonetic humbug, which is so wonderfully to "draw upon you the gratitude of nations yet to be." Those nations will take care of their own orthography, and will be more obliged to you if you can learn them through the pages of your valuable book, the right method of raising one additional potato, than they will if you fill it full of phonetics and fiddle-faddle of that sort.

"I should like to know if the only way to cure the pole-evil in horses is to cut their heads off? Yours with best wishes,

"E. A. Goodnough."

As to his last query, he will find that there is difference of opinion; but we believe the thing *has been done.*

Madison Plow Factory.—

This establishment was consumed by fire about two months since; but the enterprising proprietors, Messrs. Billings & Carman, immediately set about rebuilding in a substantial manner, of stone. They are now about ready to move into their new shop, and with the increased facilities for doing business, they will be able to accommodate all customers on short notice.

Godey's Lady's Book.—

This splendid magazine is always ahead of the time. The August number is received, and like all of its predecessors, is a credit to its enterprising publisher and to American genius. This No. contains two steel engravings—one a colored fashion plate; 100 pages, 47 engravings, and 64 contributions. Now is a good time to subscribe. Terms—1 copy one year, $3; 2 copies, $5; 6 copies, $10. Address L. A. Godey, Philadelphia.

County Agricultural Societies.—

We wish the Secretaries of the various County Agricultural Societies, and other kindred associations, throughout the State, would inform us of the times and places of holding their respective fairs, as we wish to publish as large a list of them as possible in the September number, for the information of those who may wish to attend.

Premium Lists.—

We hope all societies in making up their Premium Lists, will offer the FARMER for dollar premiums, as far as they think with us, that it is the best possible premium to give. A dollar in money, as we have before said, usually vanishes like water spilt upon the ground; while a good agricultural periodical, or book, is read and re-read, and often pays dollars for every cent it costs. Who will dispute it? Then why should societies be so delicate about offering books for premiums?

It ought not to be forgotten that the true mission of such societies is to enlighten and benefit the people—not merely by putting another dollar into their pockets, but by putting the best instructive agencies into their hands. How can it be done so well, as in the shape of good agricultural papers, or sterling books?

Messrs. Cook & Belden—

Of Gold and Silver notoriety, we regard as entitled to the entire confidence of those who deal in jewelry, watches and all kinds of ornamental ware—either of silver or gold—solid or plated. One very essential quality in the composition of a jeweler—*integrity*—this firm possesses in an eminent degree. If they dispose of an article as genuine, remark it—*it is so*. We have been acquainted with the reputation they enjoyed in Western New York, and predict for them similar success in this section. Their present stock is ample and well selected. See adv.

Crops in Minnesota.—

DAVID L. KING, of Rochester, Minnesota, at the end of a business letter writes: "This is fine growing weather and the crops look well. Fall and Spring wheat is very promising; oats, corn and potatoes likewise."

When in Milwaukee,

Recently, we looked through the large Jewelry establishment of Messrs. LOOMIS & HOES, at the corner of East Water and Wisconsin Streets, and found it all we have formerly recommended it. Their prices are as favorable as we found them in New York and Boston; and their stock is immense. All visiting Milwaukee and wishing acticles in their line, should certainly look through their establishment before buying. See their card in our advertising columns.

To Correspondents—

The following communications have been received and will appear in due time:

"Wheat and Chess"—J. BRITTS.
" " " M. T. B.
"The Horse—its Management, &c." J. S.
"Our Common Schools"—O. P. D.
"Alphabets"—A JR,
"Phonotopy"—R. E. W.

School Books.—

By favor of the agents we have received the following School Books for inspection. We have not found time to look them thro', nor are we sufficiently acquainted with the science of teaching to judge of the relative merits of the different series:

From E. B. GRAY, agent for A. S. Barnes & Co., publishers of the National Series of School Books:

Parker's Word Builder—First Lessons in Reading,
Clark's New English Grammer,
Brookfield's First Book in Composition,
Davies' Primary, Intellectual, New School and University Arithmetics,
Monteith's First Lessons in, and Manual of Geography.
McNally's School Geography.

A complete list of this popular series, with a few notices and the price of each book, will be found on the 379th page, which friends of education will please examine.

From M. TABOR, agent for D. Appleton & Co., Ivison & Pinney, New York, and S. C. Griggs & Co., Chicago:

Sander's New Third and Fourth Readers,
Sander's Young Ladies' Reader,
Quackenbo's Composition and Rhetoric,
Cornell's Primary and Intermediate Geographies,
Green's Class Book of Botany, Warring's Elements of Agriculture, Youman's Class Book of Chemistry and Hitchcock's Geology. These four last are studies we should be pleased to see introduced into every school in the State.

The Home Magazine—

Edited by T. S. ARTHUR and VIRGINIA F. TOWNSEND. Who, that is familiar with these names, (and what American over the age of ten years is not?) needs any further assurance of the literary worth of any magazine than that it is edited by two such authors? But this is not all—they are assisted by a good corps of correspondents, and the August number, which is before us, contains twenty-seven illustrations. Terms—$2 a year; four copies, $5. Address T. S. Arthur & Co., 103 Walnut St., Philadelphia.

C. M. Saxton & Co—

In our advertising columns, offer a splendid list of premium standard books, embracing everything in the line. They are invaluable to every farmer, gardener, or even business man, and should be in every family and school district library in the State. They are worth all the yellow-covered literature that ever was or will be published to the end of time. The reader will notice that they offer to send any or all of them by mail, *postage free*, to any part of the U. S., making them just as cheap to the far resident of Wisconsin, or Minnesota, as to the dweller in the city of New York.

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We are personally acquainted with these gentlemen, and feel a particular pleasure in recommending them as prompt and reliable men, who can always be depended upon. We esteem it just as safe to send them money for books by mail, (registering the letters,) as to step into their store, to select in person. Our strawberry illustrtions, in this number, are copied from a new work just published by them, entitled "The Complete Manual for the Cultivation of the Strawberry." It also treats on and illustrates the cultivation of the Raspberry, and Blackberry. Price of the mail edition, 50cts. It is worth five times that sum to any unpracticed person about to embark in such culture. See it in their advertised list, and send for it by mail.

The Western Farm Journal.—

This is a new weekly agricultural journal, published at Louisville, Ky., under the auspices of their recently organized State Agricultural Society, and edited by Wm. D. Gallagher, one of the most noted and experienced among American agriculturists—and, withal, a Poet and Literateur of well established fame. We enjoyed the pleasure of a brief acquaintance with Mr. G. during a short visit with which he favored our town last season. We do not hesitate to predict for the Western Farm Journal a popular and useful career under his management. The first numbers received, are fine specimens in all respects. Subscription price, $2 per annum. It is issued from the same office with the Commercial Review, which, by the way, is also one of the cleanest and most tasty papers upon our whole exchange list.

O. O. Buck & Co.—

We were recently through the Furniture and Upholstery establishment of this enterprising firm, and were surprised at the amount of business they were doing. Furniture of every kind, from the richest styles to the commonest qualities, seemed to be going off to city and country customers at a rapid rate, and at prices that struck us as decidedly low. Their rapid and remarkable success arises from the fact of their being men who attend to their owh business and spare no pains to please. They employ a large number of workmen, and are contributing materially to the prosperity of Madison. Those of our citizens who feel an interest in the growth of our city and county should patronize these enterprising home establishments.

We Would Call Attenton

To the advertisement of W. D. Bacon, Esq., agent for the celebrated Rail Road Horse Power, Thresher and Winnower, of Wheeler Melick & Co., together with various other articles valuable to the farmer. From our long personal acquainrance with Mr. B., we feel fully warranted in assuring our readers that he will always be found dealing in the best of everything of its kind, and none other. He has been extensively engaged in introducing valuable machinery into the State, for many years, and so far as we have ever heard, giving universal satisfaction.

American Institute Fair.—The 28th Annual Fair of the American Institute will be held at the Crystal Palace, beginning Sept. 22, and continuing till Oct 25. New dies have been procured for the gold, silver and bronze medals. The gold medal will be double the present size, and will be awarded only to the best machinery, and other articles of high merit. The silver medal will also be enlarged. The bronze medal is a new feature. The new dies will be ready for exhibition during the Fair. A list of premiums is announced for grain, flour, fruits, flowers, vegetables and dairy productions. Quack medicines to be expelled ignominiously, as last year.

Birds Poisoned by Painted Cages.—It is not safe to keep birds in painted wire cages, especially in warm weather. The paint softens in the heat, the birds are apt to nibble it, and to get poisoned. This is a fact, and tnose having valuable birds in such cages should remove them.

Rich Men.—The Boston papers publish the annual list of the rich men of Boston taxed over $6,000 per annum. Well, we have not near so many rich men. They beat us on that, but we'll bet a hundred acres of rich Wisconsin wheat land to a rod of Massachusetts rock, that if they try it on and publish a list of their poor men, Boston alone will beat all Wisconsin ten times over. We have not their riches, thank God, but thank God a great deal more we have no such list of poor as they can muster.

[Milwaukee News.

Directions for Restoring Persons Apparently Drowned.—The following directions for restoring persons apparently drowned, which were issued by the Massachusetts Humane Society, are of general interest, and may be of great service at this season, when deaths from drowning are so frequent. "Convey the body to the nearest house, with head raised. Strip and rub dry. Wrap in blankets. Inflate the lungs by closing the nostrils with the thumb and finger, and blowing into the mouth forcibly, then pressing with hand on the chest. Again blow in the mouth and press on the chest, and so on for *ten minutes*, or until he breathes. Keep the body warm, extremities also. Continue rubbing—do not give up as long as there is any chance of success."

[N. E. Farmer.

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We Are Indebted

To our Friend BROWN, of the Ohio Farmer, for the beautiful cut of Romeo.

Milwaukee Stove Store.—

Branch at Madison, I. BONNELL Agent. Goods sold on reasonable terms. See advertisement.

All Who Want Wearing Apparel—

On the most reasonable terms, will do well to notice the advertisement of H. B. MERRELL & Co.

IMPORTANT BOOKS FOR FARMERS.

Allen's American Farm Book.

The American Farm Book; or, a Compend of American Agriculture, being a Practical Treatise on Soils, Manures, Draining, Irrigation, Grasses, Grain, Roots, Fruits, Cotton, Tobacco, Sugar Cane, Rice, and every Staple Product of the United States; with the best methods of planting, cultivating, and preparation for market. Illustrated by more than 100 engravings. By R. L. Allen. Cloth, $1.

The Stable Book.

A Treatise on the Management of Horses, in relation to Stabling, Grooming, Feeding, Watering, and Working, Construction of Stables, Ventilation, Appendages of Stables, Management of the Feet, and Management of Diseased and Defective Horses. By John Stewart, Veterinary Surgeon. With notes and additions adapting it to American Food and Climate. By A. B. Allen. Price, $1.

Allen's Diseases of Domestic Animals.

Being a History and Description of the Horse, Mule, Cattle, Sheep, Swine, Poultry and Farm Dogs. with Directions for their Management, Breeding, Crossing, Rearing, Feeding and Preparation for a profitable Market; also, their Diseases and Remedies. By R. L. Allen. Cloth, 75 cts.

Guenon on Milch Cows.

A Treatise on Milch Cows, whereby the Quality and Quantity of Milk which any cow will give may be accurately determined by observing natural marks or External Indications alone; the length of time she will continue to give Milk, &c., &c, Illustrated with numerous Engravings. Price, neatly done up in paper Covers, 87½ cents. Bound in cloth, 60 cts,

Johnston's Elements of Agricultural Chemistry

And Geology. With a Complete Analytical and Alphabetical Index, and an American Preface. By Hon. Simon Brown, Editor of the "New England Farmer." Price, $1.

These Books will be sent *FREE OF POSTAGE* on receipt of price.

Our Full Catalogue, embracing Eighty Agricultural Works, sent to any address.

C. M. SAXTON & Co.,
Agricultural Book Publishers,
Aug. '56, 1m. 140 Fulton Street, New York.

BINDING
DONE AT THIS OFFICE.

MAGAZINES, MUSIC AND

Miscellaneous Books Bound on Reasonable Terms.

Blank Books Manufactured.

POWERS & SKINNER.

MADISON, Wis., Aug.. '56.

E. B. CRAWFORD,

FASHIONABLE MERCHANT TAILOR,

KING St., (Near Madison House.) MADISON, WIS.

JULY, 1, 1856.

NOTICE.

THE SUBSCRIBER would inform Farmers and others concerned, that he proposes to dispose of about one half of his fine flock of Merino Sheep, during the present season. They are from three-fourths to full blood Merino; and numbers of the Ewes sheared fleeces of *Superfine Wool* which, when washed, weighed from 7 to 9½ pounds; many of the last year's lambs, from 5 to 7 pounds; and the whole flock of nearly

Eight Hundred Sheep,

averaged 4½ pounds of washed Wool per head. Considering the extraordinary hard winter, together with the fact that they were not very well taken care of, we think such a product of wool is an ample recommend for the Sheep, and it shows what they might do in smaller flocks, and properly cared for.

These Sheep, except the Bucks, were all raised in Wisconsin, and have always been perfectly healthy; and, being mostly Ewes, they are just the stock from which to start the right kind of flocks.

We will sell, or let them in parcels, to suit parties, and for prices, and on terms of payment as favorable as can be wished, provided always the security is satisfactory.

We have also a choice lot of Merino Bucks, which we would sell, or exchange for others equally good, as we wish to avoid breeding in and in. Also a few choice Buck Lambs, for sale cheap.

Any further information desired we will give by mail or otherwise, and the sheep may also be seen on the '76 farm, four miles north-east of Madison.

D. J. POWERS.

MADISON, Wis., Aug. 1856. tf

TO
AGRICULTURAL AND HORTICULTURAL
Societies.

WE WOULD particularly invite the attention of those Societies, who are about to make up their PREMIUM LISTS, to our large collection of Agricultural Books, which are peculiarly adapted for Premiums.

The awarding of Agricultural Books, in the place of small Money Premiums, has been extensively adopted, and has given the highest satisfaction.

ADVANTAGES OF THIS PLAN.

It promotes the dissemination of much needed information among Farmers.

It combines the advantages of a Diploma with a Premium of Intrinsic value.

It substitutes a permanent and Expressive Token of Honor for the pittance which is frequently humiliating to the recipient.

It avoids the fostering of a mercinary spirit among Competitors, and better comports with the dignity of an honorable emulation between Friends and Neighbors.

We will be happy to furnish to applicants a Catalogue of those of our Publications which we consider most appropriate for the use of Agricultural societies, for Premiums, on which a liberal discount will be given.

C. M. SAXTON & CO.,
Agricultural Book Publishers,
Aug. '56. 2m. 140 Fulton St., New York.

NEW MILLINERY STORE.

NO. 4, WASHINGTON AVENUE,

MADISON, WISCONSIN.

HAVING just returned from the East with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the LADIES to my newly selected stock of

Bonnets, Ribbons, Flowers,

and general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS,

SILKS AND CASHMERES,

together with an Elegant lot of Dress Goods. Also

YANKEE NOTIONS

in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis, June, '56. tf.

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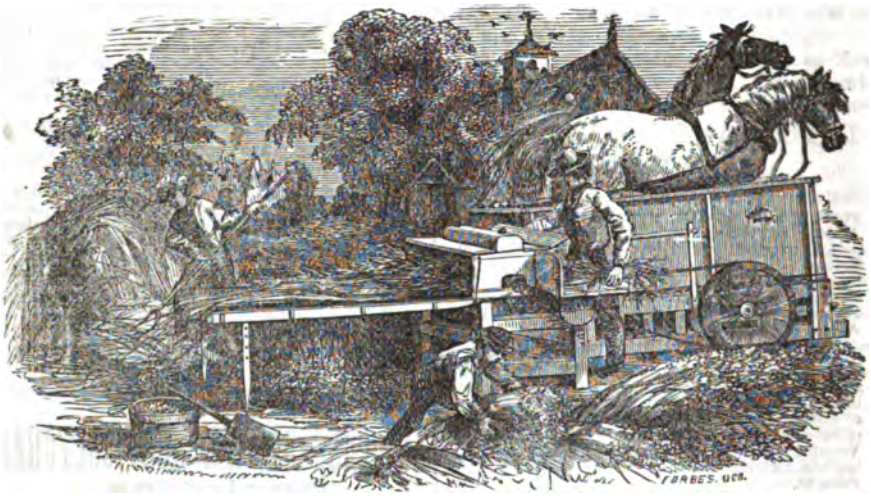
CHICAGO

AGRICULTURAL WAREHOUSE

AND

SEED STORE.



EMERY'S PATENT CHANGABLE RAIL ROAD HORSE POWERS, THRESHERS

AND SEPARATORS,

THRESHERS & WINNOWERS—CIRCULAR AND CROSS CUT SAWS, FEED MILLS OF VARIOUS PATTERNS FOR POWER. LITTLE GIANT CORN & COB MILLS. GRAIN DRILLS—SEYMOUR'S, PENNOCK'S MOORE'S.

Wheel Cultivators,

Roger's and Others'. Clover Hullers, Mansfield & Crawford's.

CIDER MILLS—EMERY & HITCHCOCK'S. BROADCAST SOWERS—SAGE AND OTHERS'.

HARROWS—GEDDES & SCOTCH. CORN SHELLERS FOR POWER OR HAND,

MONTGOMERY'S, GRANT'S, EAGLE, RACINE AND MARSHALL FANNING MILLS.

Hay Cutters,

OF ALL VARIETIES AND PATTERNS. KETCHER'S AND DANFORD'S PATENT

MOWING MACHINES.

WITH A FULL ASSOSTMENT OF ALL THE MACHINES AND IMPLEMENTS NECESSARY TO THE PRACTICAL FARMER.

Seeds, Grains, &c., &c.

FALL WHEAT OF SEVERAL VARIETIES AND TRUE DEMAND.

ALSO

GRASSES AND GRAINS OF EVERY VARIETY FOR FALL SOWING.

Orders Promptly Attended to.

CIRCULARS AND CATALOGUES SUPPLIED, GRATIS, ON REQUEST.

H. D. EMERY & CO.,

Chicago Agricultural Warehouse and Seed Store,

No. 204 Lake Street, Chicago, Ill.

CHICAGO, ILL., August 1, 1856. tf.

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SCHOOL BOOKS FOR WISCONSIN!

RECOMMENDED JANUARY 19TH, 1856, BY

HON. A. C. BARRY, State Superintendent.

It is proper to state that the following Books were selected among others, by the Hon. A. C. Barry, to be the Text Books for the State of Wisconsin, as per his letter to the Publishers, under date of January 19, 1856, in which he states that he had recommended them:

GEOGRAPHIES.

MONTEITH'S FIRST LESSONS IN GEOGRAPHY, ... .15
MONTEITH'S YOUTH'S MANUAL OF GEOGRAPHY, ... 50
McNALLY'S COMPLETE SYSTEM OF GEOGRAPHY, ... 1,00

In cheapness, adaptation to the different grades of schools, improved methods, and execution, these Geographies according to the testimony of many of the best Teachers, are unsurpassed. (See testimonials.)

The new series of Geographies, by JAMES MONTEITH and FRANCIS McNALLY, is generally admitted by those who have examined or used it, to be better adapted to the present wants of the school-room than any other published. They are *practical*, complete, concise, well made and cheap. "Monteith's First Lessons in Geography" presents the outlines of the subject in a simple and attractive form, and does not fail to interest the beginner. "Monteith's Manual in Geography," is made for primary or intermediate classes. It gives the leading features of Geography combined with History and Astronomy, in a manner so well arranged and condensed as to make it possible for the beginner, who may have the advantages of school no more than three months in the year, to complete the subject in that time, and possess himself of a general knowledge of the entire matter. This is just the book for *Country Schools* that are taught only a part of the year.

McNALLY'S "School Geography" completes the Series. This is a quarto of 98 pages, and is designed for advanced classes. It is a new book, and not only contains many radical improvements in the *manner* of treating the subject, but all the latest statistical information, and the changes in political divisions. It would be impossible to give here all the improvements which recommend this book, but the main one, and that which will readily give it favor with all scientific instructors, is that it is the only book extant which embraces the science of Geography only. History and Astronomy are studied as distinct sciences. Why should not Geography be entitled to the same consideration? Our best teachers have long been annoyed with the lumber and foreign matter, introduced into the Geographies put into the hands of their pupils. The immense popularity of this work considering the short time since its publication, proves that it is eminently adapted to the present wants of our schools.

ARITHMETICS.

DAVIES' PRIMARY ARITHMETIC, (*Revised Edition.*) ..... .15
DAVIES' INTELLECTUAL ARITHMETIC, (*Revised Edition.*) ..... .25
DAVIES' NEW SCHOOL ARITHMETIC, (*Revised Edition.*) ..... .40
DAVIES' UNIVERSITY ARITHMETIC, (*Revised Edition.*) ..... .75

Davies' Arithmetics are in more general use than any others. Teachers are attached to them for the brevity and correctness of their definitions and their simplicity of style. They need no praise, having been so long known, and so universally used, that there are but few teachers who are not acquainted with them. The "Intellectual" possesses all the excellencies of Colburn's, without its defects of system. The revised edition of the "School Arithmetic" is meeting with unlimited success and favor East and West. The attention of Teachers is especially called to the merits of these books.

DAVIES' ELEMENTARY ALGEBRA, ... .75
DAVIES' ELEMENTARY GEOMETRY, ... 1,00
DAVIES' BOURDON'S ALGEBRA, ... 1,50
DAVIES' LEGENDRE'S GEOMETRY, ... 1,50
DAVIES' ELEMENTS OF SURVEYING, ... 1,50
DAVIES' CALCULUS, ... 1,50
DAVIES' DICTIONARY OF MATHEMATICS, ... 2,50

ENGLISH GRAMMAR, COMPOSITION, &C.

CLARK'S NEW ENGLISH GRAMMAR, ... 60
WELCH'S ANALYSIS OF THE ENGLISH SENTENCE, ... 75
BROOKFIELD'S FIRST BOOK IN COMPOSITION, ... 40
WRIGHT'S ANALYTICAL ORTHOGRAPHY, ... 25
PARKER'S WORD BUILDER, ... 25
NORTHEND'S DICTATION EXERCISES, ... 25

HISTORIES.

WILLARD'S SCHOOL HISTORY OF THE UNITED STATES, ... 75
WILLARD'S LARGER HISTORY OF THE UNITED STATES, ... 1,50
WILLARD'S UNIVERSAL HISTORY, ... 1,50
WILLARD'S HISTORIC GUIDE, ... 62½

Mrs. Willard's Histories are the Standard works throughout the United States.

Natural Philosophy.

PARKER'S JUVENILE PHILOSOPHY, Part First, ... 25
PARKER'S FIRST LESSONS IN NATURAL PHILOSOPHY, ... 85
PARKER'S SCHOOL PHILOSOPHY, ... 1,00

These books are rapidly superseding other works upon this subject.

FULTON & EASTMAN'S BOOK KEEPING, ... 75
BLANKS TO FULTON & EASTMAN'S BOOK KEEPING, six in a set, ... 75

Teachers and School Officers will receive by mail, any of these recommended books for examination on the receipt of *ONE HALF THE PRICES* given above—*Postage free.*

To those wishing to introduce these books into schools, we will furnish them at *LARGE DEDUCTIONS* from the above prices. Address the publishers—

A. S. BARNES & CO., New York, or
E. B. GRAY, Milwaukee, Pub. Agent.

IN PRESS—SCHOOL CHEMISTRY, by Professor John A. Porter. Will be published on the first of July.

MILWAUKEE, August, 1856. tf.

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COOK & BELDEN,

Capital House Block, Madison, Wis.,
Have constantly on hand a complete assortment of

WATCHES, JEWELRY,

PURE SILVER AND PLATED WARE,
FANCY GOODS, CLOCKS, &C.

All Goods warranted as represented or money refunded. Silver Work bought at our store is Engraved free of charge. Watches and Jewelry Repaired and warrented, by *Experienced Workmen.*
MADISON, August, 1856, tf.

1856] MILWAUKEE [1856

STOVE STORE,

ISAAC BONNELL—AGENT,
Wholesale and Retail Dealer in Stoves, Tin and Japanned Ware, and Agent for

HERRING'S CHAMPION SAFES,
FAIRBANK'S PATENT SCALES,
WAREHOUSE TRUCKS,

Cistern and Well Pumps, Corn Shellers, Clothes Horse Castings, Flat Iron Heaters, Charcoal Furnaces, Robinson's Patent Double-Acting Downward Draft Gridiron, &c., &c. Also Manufacturer of

Tin, Sheet Iron, Copper & Zinc Ware.

JOB WORK

Of every description done at short notice, and on the most reasonable terms.

MORRIS ST., NEAR THE CAPITAL HOUSE, MADISON, WIS.

N. B.—Goods sold at Milwaukee prices, adding transportation. Terms Cash.
MADISON, Wis., Aug. 1856. tf.

MENDOTA NURSERY.

A MILE AND A HALF WEST OF THE STATE UNIVERSITY.

TREES, SHRUBS, VINES, &C &C.

H. F. BOND.
MADISON, WIS., Aug., 1856. t.f.

RANDALL & JONES'

PATENT DOUBLE HAND

PLANTING MACHINES.

J. HERVA JONES, Inventor and Proprietor of the Patent for New York, Michigan, Wisconsin, Minnesota, and Northern Illinois.

OVER THIRTY First Premiums awarded—and over *Fifty Thousand Acres of Land Planted* with them in 1855! Twenty Acres of Corn have been planted by one man with one of them, in one day! I challenge any man, with any implement whatever, to a trial test—either on *time, quality* or *expense* of planting. I will give any person *Five Thousad Dollars* who will produce its *superior.* I have cuts and descriptions of a

NEW MARKER,

my own invention, which will *save much labor in cultivating*, and which I will mail free to all who purchase my Planters.

Rights and Machines for sale. Send for a Circular.
J. HERVA JONES.
ROCKTON, Winnnebago Co. Illinois. Apr. tf.

FURNITURE!

1856. [redacted] 1856.

O. C. BUCK & CO.,
MANUFACTURERS AND DEALERS IN

Cabinet and Upholstery.

Rooms on Washington Avenue, East of the American Hotel, and on Morris Street, near the Court House,
MADISON. WIS.

KEEP constantly on hand everything wanted in the furnishing line. Buying all our Goods in the Eastern market, we can of course sell cheaper than establishments purchasing of Western Jobbers.

Beds and Bedding,

Of all kinds and qualities. Mattrasses, Hair, Excelsior Husk and Sea Grass. Take your choice and we can suit all tastes.

SOFAS, CHAIRS, CENTRE-TABLES, BEDSTEADS, LOUNGES, WARDROBES, BUREAUX, SIDE-BOARDS, LOOKING GLASSES, &C., &C.,

Together with innumerable too small and numerous to be mentioned, and too useful to be overlooked. We are now prepared to supply orders at Wholesale as well as Retail as heretofore. Country Merchants will take notice.

Look out for the Big Sign on Washington Avenue, East of the American Hotel.

O. C. BUCK,
WM. HAWLEY.
C. C. CHURCH.
MADISON, August 1, 1856. tf.

BOSTON BOOT AND SHOE

STORE.

Magnificent Stock and New Arrangements.

HAVING purchased the magnificent stock of Boots and Shoes of WILLIS, NEIL & CO., I am now prepared to offer to the people of Madison and vicinity, an extensive assortment of Custom made Work, from the best manufacturer in the East, and at Eastern prices. My motto is, "Low prices, Small Profits, and Quick Sales." For the Ladies, Misses and Children, my assortment of Boots, Gaiters, Buskins and Slippers, of every variety and style, both quality and price, is not equalled in the West. For the Gentlemen, Boys and Youths, I have almost everything worn or called for: every style and variety of *Boots, Congress Gaiter—Oxford, French and Jersey Ties*—and a great variety of Boots and Shoes, which for style, quality and price, cannot fail to please all.

At Curtis' old Stand, near the Capital House.

D. M. BURWELL.
MADISON, Wis., Aug. 1856. tf.

MADISON PLOW FACTORY.

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel plows which we will sell cheaper than any other plow of the kind ever offered in this market.

We would also call your attention to our Breaking Plows, and we feel confident their equal cannot be found east or west, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

☞ TIBBITS & GORDON are the only Agents in Madison.

C. H. BILLINGS. S. H. CARMAN.
MADISON, Feb. 1, 1856. t.f.

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UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1,—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.
COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT,	do do.	3,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

CLOTHING.

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings---a Beautiful Assortment.

GENTS. CRAVATS

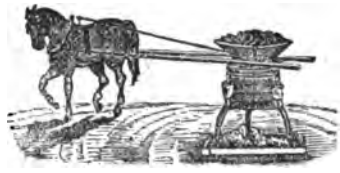
and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, MADISON, June, 1856. tf.

IMPROVED

LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 28d of February last. A Committee composed of Gov. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his.

TOLL, TIME AND LABOR

of going to mill, It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

Price---No. 2 Complete, $45,00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $55.00, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses. Price, $65.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis., L. A. WINCHESTER, WM. DeWOLF.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

☞ All Communications promptly Attended to. ☜

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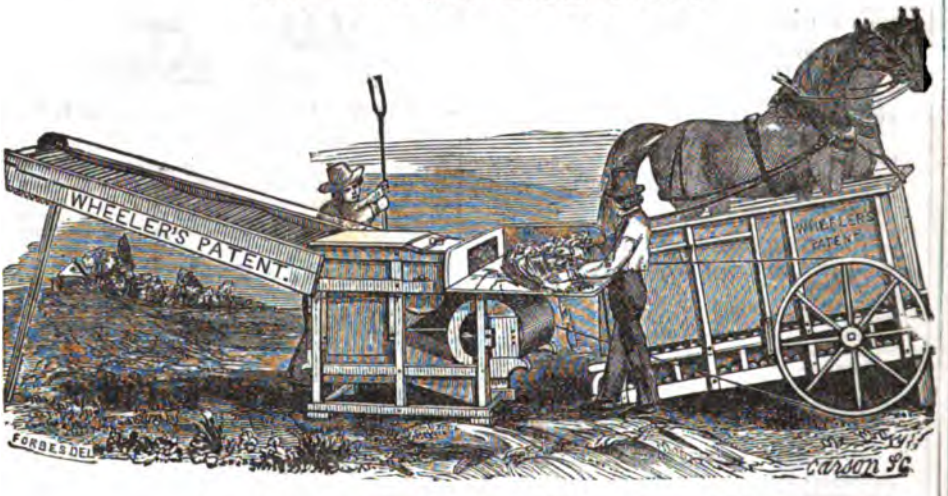
NEW YORK STATE AGRICULTURAL WORKS,

BY

WHEELER, MELICK & CO.



[*Double Power, and Combined Thresher and Winnower, in operation.*]

We are Macufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of Wheat or twice as many Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Overshot Thresher with Vibrating Separator.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price $160.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Combined Thresher and Winnower.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of Wheat and 300 bushels of Oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine. **Price $245.**

Also Clover Hullers, Feed Cutters, and Sawing Machines.

Our Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines, that admit of being driven by Horse Power, and our Threshers may be driven by any of the ordinary kinds of Horse Powers in use—either are sold separately.

☞ To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery 22 years, and have had longer, larger and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

☞ Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by the cheapest and best routes.

WHEELER, MELICK & CO.

Albany, N. Y.

MAY 1, tf. 1856.

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Madison Agricultural WAREHOUSE.

OF

SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constansly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS, Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
90 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
90 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
apr-tf . At sign of Pad Lock, Morris Street.

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND *MANUFACTORY,*

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6×6. 6. to 2.10×7ft., 1¼ & 1⅛⅜in. thich, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing arficles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great ecomomy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.
MADISON, Wis., June, '56. tf.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "

Joice's "Starr" CORN & COB CRUSHER, Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.
MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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H. B. MERRILL & Co.,

(SUCCESSORS TO COBB & MERRILL.)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's ware, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c,

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishmedt the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

Jy'56tf. No 3, FAIRCHILD'S BLOCK, MADISON, WIS.

LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

A HOME

FOR INVALIDS AND THEIR FRIENDS,

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor E. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

Terms for board and treatment, $9 to $12 per week. Excellent stabling and carriage room is provided for those who wish to keep their own conveyance. Circulars sent on application.

Address E. A. KITTREDGE, M. D.
Lake Side Water-Cure, Madison Wis.

July 1, 1856, tf.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. E. POWERS.

SPLENDID FARM,

FOR SALE.

A FARM embracing 100 acres of superior Land, with several varieties of the best kinds of soils—about 40 acres under fence and plow, with about 10 acres of good mowing land—the balance timber and openings—lying half a mile from the city limits of Madison, and nearly three miles from the State House and Capitol Park, on Wyseora Creek.

The *Buildings* on it are convenient and comfortable—consisting of a good frame House, cellar, wood-house—a substantial frame Barn, Horse-stables, Cattle-sheds, Hen-house, a good log house, and other necessary outbuildings—with a good well, several fine springs, and a living Creek running through the whole length of the Farm, affording excellent water for stock on different parts of it, with plenty of excellent fish in it.

There is also, on the place, a large *bearing Orchard* of choice grafted Apple Trees, besides other fruit, with abundance of Strawberries, Raspberries, Currants, &c.

In short, there is no better or more pleasant farm in the country—with every convenience for an immediate comfortable *Home*, for a good family of means and stock. Possession can be had at once, or in October, as may best suit the purchaser.

The present owner is entirely suited and pleased with the place, and would be glad to keep it for a constant home; but his pecuniary circumstances will not warrant his keeping so valuable a Farm, and therefore he desires to *sell it soon*, to some one more able to own and enjoy it than himself.

The *price* is one hundred and ten dollars ($110) per acre, one third down, and the balance on time of three or four years; which is well known, by all acquainted with the place, to be very low, for one of such good improvements and advantageous location, as this farm possesses.

One half, or the whole, will be sold, as shall be desired by the purchaser. Enquiries may be made at the WISCONSIN FARMER Office.

P. S.—Horses, Cows, Tools, and the Crops on the ground, will be sold with the farm, if desired.

MADISON, July, 1856. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as *any house West of New York.*

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

Merino Sheep For Sale.

THE SUBSCRIBER having had devolved upon him unexpectedly, the charge of a large flock of Sheep and being inexperienced in their care and management, offers at private sale upwards of five hundred full blooded Merino Ewes and Wethers. They comprise one half of the fine flock recently owned by E. W. Edgerton and Rob't M'Carter; and the stock has taken repeated successive premiums at the State Fair. Their fleece last year sold for forty cents per pound.

These Sheep will be sold cheap and in lots to suit purchasers, and may be seen on the premises of the subscriber at Waterville, Waukesha Co., Wis.

The Cars of the M. & M. R. R. stop at Genesee, and those of the M. & W. R. R. stop at Oconomowoc either station being within an hours ride of the farm.

CHAS. WHITAKER.

Waterville, June 24th 1856. jy. 3 mo.

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SEPTEMBER, 1856.

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

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TERMS—INVARIABLY IN ADVANCE:

SINGLE COPIES, $1 PER YEAR—FIVE COPIES, $4,50—TEN COPIES, $8—FIFTEEN COPIES $12—TWENTY COPIES, $15, AND ONE FOR THE AGENT.

All subscriptions to commence with January and July.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**
MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

Janesville
AGRICULTURAL WAREHOUSE
—AND—
SEED STORE.

ELDRED BARROWS & CO.,

Wholesale and Retail Dealers,

HAVING opened an extensive establishment for the sale of Agricultural Tools, Farming Machinery and all kinds of Seeds—would respectfully call the attention of the Farmers of Rock and adjoining Counties to their Stock, comprising the *latest and best improvements*, purchased with care, direct from the most approved manufacturers.

We would invite a particular examination of our stock of Steel Plows—consisting of the Massachusetts, Chicago, Moline, Wisconsin, and other patterns. We have also a large stock of Horticultural Implements, from late importations.

Seed Department.

We shall give *especial attention* to this Department, and shall at all times keep a full supply of the choicest *Field, Garden and Flower Seeds* in their *season*, selected and put up *expressly for our own sales*, all of which will be sold *cheap for cash*.

AGENTS—for Eastern Manufacturers—Pitkin's Osage Orange Seed for Hedges, (with directions for raising)—and for the "Wisconsin Farmer."

CASH PAID FOR CLOVER AND GRASS SEED.

P. S.—To those dealers who purchase West of the Lakes, we offer every inducement to buy of us, as we can furnish all articles in our line at the lowest possible prices.

Corner of Milwaukee and River Streets, west side of the river.

JANESVILLE Aug., 1856. 6t.

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1865, Sept. 15.

WISCONSIN FARMER, AND NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., SEPTEMBER, 1856. NO. 9

SUGGESTIONS FOR SEPTEMBER.

"Whate'er the wanton spring,
When she doth diaper the ground with beauties,
Toils for; comes home to autumn; summer sweats
Either in pasturing her furlongs, reaping
The crop of bread, rip'ning the fruits for food,
Autumn's garners house them, autumn's jollities
Feed on them." *Ford and Decker.*

September is the initiatory month of autumn, though often in this western country, as mild and pleasant as summer. Still its fair appearances, and lingering smiles do not change the fact that summer is actually past, and that winter, though yet remote, is actually again approaching; and sooner than it is desired, by some of us at least—perhaps before we are prepared for it—will again be upon us.

We allude to this matter, at this time and thus early, for the purpose of calling attention to the condition of the farm buildings, and fixtures generally about the premises; for the reason that September and October are the only remaining months of the year, in which it is proper, or profitable, to rig anything of the kind.

Building of any kind done in November, usually costs fifty per cent. more than in May, June or September, and often one hundred per cent. more, when done in December instead of the proper season. These are admitted facts, that everybody knows who has had any experience; and yet how many men there are, who will allow the pleasant balmy days of September, and Indian Summer even, to pass away, while their work lingers, through mere negligence or lack of energy, till the wintry winds begin to whisper in tones not to be misunderstood.

Then at last they get in a great hurry, when it is too late—when everybody else is drove, and no help can be obtained, for love or money. Then you will see them digging post holes in the frozen ground, or shoveling their lumber out of the snow; or, if it is a house under construction, then the mortar is to be thawed out by the kitchen fire, and the newly plastered rooms to be kept from freezing by extra stoves and fires, and probably frozen and spoiled at last. That is the way a deal of the work is done in this new country, and not unfrequently in old ones; but it is none the better economy for that.

We say then to all who have any building work to be done, to drive it as early and hard as possible, while the season is suitable; by so doing about one half of the expense will often be saved, besides having a much better job when done. As to details and particulars in farm building, we shall refer to it from time to time, as one of the all important subjects that cannot well be exhausted.

The farm stock needs looking after this month; and more especially the milch cows of those who have no tame grass pastures. The wild grass begins early to dry up and suffer from the frost, and cows will be found to shrink rapidly in their milk without extra feed. We have also been led to believe that the acorns they pick up and eat so voraciously in the openings and timber, tend to dry them up still more speedily.

The fall crop of butter is poor at the best with us, and accounts for its usual scarcity and high price. We repeat what we have frequently said before: we must have more cultivated grass and clover, or cease to think of doing much with good stock or dairies. The thing is impossible. True, the wild grass is tolerably good for a while, but at the best for not over four months of the year; leaving eight months of foddering. The consequence is—everything on the farm is eaten up clean, coarse grain and all, and the stock often comes out poor at that. No, gentlemen, such kinds of stock farming will not pay. You must either cultivate the tame grasses, or give up keeping any but absolutely necessary stock, or lose money. So it looks to us.

Harvest your crops in good season, and

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take special care to select some of the finest and earliest, for your next year's seed. Do not put it off for the present, and finally neglect it entirely; and next spring be seen inquiring round among your neighbors for seed corn, and perhaps taking it out of the bin at last, and running the risk of its coming up at all. How many of you did it last spring?—and how did you fare in consequence of it? Learn from experience at least.

Then the potatoes—if you would not have them rot, dig them early, before the fall rains set in; and store them in dry cool shape for winter; it is the best preventive we know of.

Thresh your wheat as early as circumstances will permit, particularly that portion that you wish to sell; so that you will be ready for a high price in the market if it occurs. Much depends on being ready for lucky strikes, instead of coming in half an hour too late, as easy men are apt to. One word more on this head; when you can get a good price for your wheat, or other products you have to sell, take it; for ten to one, if you wait for a little more, you will not do as well.

The waste incident to keeping grain on hand, the hazard of fire and otherwise, the interest on the money you perhaps owe, and the chances for a decline, all taken together, make more difference than any but very careful men think for. We repeat, when you have a good fair price offered for anything you wish to sell, take it; and pay your debts if you owe any. (And who don't?)

Then the straw, attend to that; and stack it well in a convenient place for feeding and use during the winter. Leave none of it scattered, either to waste, or as a trail to take the prairie fires to your stack-yard or buildings.

Insure your farm buildings the first good opportunity, if you have not already; but be careful what company you insure in. If you are not already posted on the subject, and satisfied with some good company with which you are acquainted, we would recommend the Madison Mutual, as one we know to be perfectly good and safe, in all respects, being familiar with its business and officers, and character generally. We say unhesitatingly to any who may wish to insure in it, that it is all right; and in saying thus much for it, we would not wish to be understood as desirous to "puff" this company ahead of others. We merely speak of it thus favorably, because we know it to be true. For aught we know the Milwaukee Mutual is another just as safe and good company; but still we are not as familiarly acquainted with its business. Doubtless there are other good companies about the State, about which people well informed can judge for themselves. But we say emphatically to all, *insure* and in a good company. Then when you burn, (and the most careful do sometimes,) you will find your policy much more substantial help than your neighbors' left-handed sympathy.

Have you a lightning rod upon your house, and barn? If not, have a good one put up the first opportunity. Mind you, a good one, if you can find it. Many of those hawked about the country for sale, are not worth taking as a gift; they are so light and imperfectly made—often being so badly fitted in the screw joints—that they will not hold together for six months, even though they are not struck; and if they were struck with any considerable force, where would they be then, at the moment of need?

In selecting, look for good sized rods, of not less than half an inch in diameter, well jointed together, and tipped with a good copper point, well plated with silver. In relation to putting up, read directions in a former number of the FARMER, on the subject.

Those who sow winter wheat, will of course be attending to it early in this month—the earlier the better. During the first seven to ten years of the early settlement of Wisconsin, winter wheat was almost uniformly sowed, and with almost uniform success. After that, two or three years of partial failure seemed to discourage almost everybody; since which time, no one hardly seems to sow winter wheat at all. True, our winters are usually open, and many of the prairie aspects bleak; still we incline to believe that the raising of winter wheat ought not to be given up so easily. We have always been of the opinion, that if it was gotten in with the same care that it is by good eastern farmers, having due regard to depth, by drilling in, or in some other

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effectual way, that in all reasonably sheltered places, good crops would almost uniformly be raised.

We hope that the better class of farmers, those who take pains with what they do, will give the subject further trial; we intend for one to do so. Aside from the superior market value of the crop, it is also a material advantage, in the way of dividing the labor of putting in the wheat crop, between fall and spring. Every one who has had experience, knows how short the springs are for all the work that crowds upon them, and how often it results in late sowing, which as often results in a poor, blighted crop.

Sheep turned early into stubble fields, will do much in the way of killing out the weeds and leaving the land clean for a next year's crop. They are the best scavengers that can be had on a farm, and every well established farmer ought to have a flock of them, for this reason alone, if for no other. But we shall say more on this head in another place.

In connection with fall wheat, a good opportunity is afforded for sowing grass seed, for those who prefer the fall to the spring. See the remarks of E. W. Edgerton, Esq., on that subject, in the April No.

Finally, we would have all recollect that September has but 30 days—Sundays and all told—and that it has a world of duties, more than we can think of, or find space to point out; meet them manfully and seasonably—don't begrudge to hire the necessary help, now, while the days are long and favorable. It will usually more than pay, by being in season with all your work. Then, again, we want you to get through in season for a leisure week, about the first of October, to attend the State and County Fairs. Yes Gentlemen, we want you to take a holiday then, and a few dollars with it, and your WIVES and children, and attend the Fairs.

Not particularly on our account, but mainly on your own. They are by far the best, and most useful holidays, in America; and better than all the Saints' days in the calendar.

To all you hard working farmers, and farmers' wives, who stick to your homes the whole year round—remote from large towns and novelties—we say, turn out; it is your privilege—it is your duty to do it. Your young sons and daughters are growing up rapidly around you, and ought to see something of the world and its inhabitants. You, too, are as rapidly growing old; don't, in your eager pursuit of wealth, forget it; but remember that unless you enjoy some of these privileges, and spend some of your money as you go, that you are cheating yourselves. These growing up children will soon follow us to our graves; let us care for them now, that they may mourn for us then.

Further, we are none of us too old or wise to learn ten times as much at any good fair as it costs to attend it. We say then to all who can, to make their calculations now in season, to be on hand. Calculate among other things, for some one to take care of the *baby*, and smaller children, so that the wife can go, if she wishes. The change of scene and circumstance, the friendly meetings, the sights and novelties, are as great a luxury and benefit to her, as to any of the male gender, beyond dispute.

In conclusion we would say, we hope to meet you all there, and make no doubt but we shall have a special good time of it.

EFFECTS OF CLEANLINESS.

Count Rumford, the celebrated practical philosopher, whose writings have been of greater value to mankind than the abstruse speculations of a host of metaphysicians, thus describes the advantages of cleanliness:

"With what care and attention do the feathered race wash themselves, and put their plumage in order; and how perfectly neat, clean and elegant they do appear. Among the beasts of the field, we find that those which are the most cleanly are generally the most gay and cheerful, or are distinguished by a certain air of tranquility and contentment, and singing birds are always remarkable for the neatness of their plumage. So great is the effect of cleanliness upon man, that it extends even to his moral character. Virtue never dwelt long with filth; nor do I believe there ever was a person scrupulously attentive to cleanliness who was a consummate villain."

☞ A Scotch farmer named Craig, says he prevents the potato disease by planting several varieties together. He thinks the potato disease may be safely attributed to the violation of nature and that the generation of the malady is occasioned by the plants being too closely bred, or in other words by sub-breeding.

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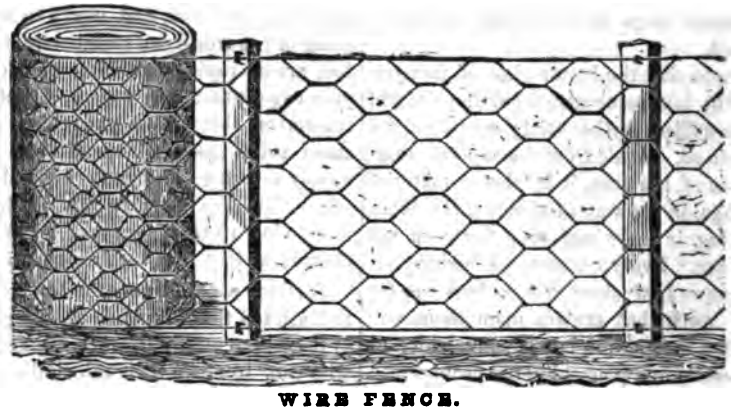

WIRE FENCE.

The above style of wire fence is beginning to attract considerable attention, in the Eastern and Middle States, and strikes us as worthy of an early trial here in the West. For if it is what it seems, and is recommended to be by many of the agricultural journals of the nation, it is certainly just the thing for the broad and timberless prairies of the West; for many obvious reasons, among which is the fact, that it presents no face to the wind, nor much material for the fires. It takes up the least possible room, and affords no harbor for weeds and brush—a grave objection to rail fences, on good farms.

It certainly would seem the nicest in all the world for tidy farm fences; and for aught we can see would last forever, if kept blackwashed with a preparation of gas-tar and resin, or any other japan mixture. If properly put up, we think it would not be injured by extremes of temperature.

It is made of all patterns, weights, hights and styles, both for plain and ornamental work, as we shall show is successive numbers of the FARMER.

The above cut represents a style, about four feet high, and weighing between 8 and 9 pounds per rod, and costs at the factory $1 per rod. We understand from Messrs. Tibbits & Gordon, who are agents for its sale at Madison, that they can furnish it for about ten per cent. added to factory wholesale prices. It certainly cannot fail to be a splendid article for village garden, and ornamental purposes; and nothing else can be found that is half so cheap and tasty.

For instance, it would not cost over $1.50 per rod, all set on posts and painted complete; which is a less sum than the cheapest kind of board fence can be made for, and painted. While a neat ornamental picket or fancy wooden fence, costs from $5 to $10 per rod. This comparison certainly shows an immense saving in favor of the wire fence.

Then again, it strikes us as just the thing for division fences between fields. For instance, the posts could be set along the alleys with hooks instead of staples in them, and the wire web for the fence could be made up in rolls of about ten rods in length, weighing from 80 to 90 lbs. each. These rolls, like rolls of carpeting, could be put in the wagon, and drawn where wanted, to the amount of two or three hundred rods, thrown upon the ground, unrolled, and two men could hook them on complete, in a short time. Then when the fence was no longer needed, or wanted in some other place; what could be easier, or handier, than lifting the lengths off the hooks, dropping them on the ground, rolling them up again, and putting them on board the wagon or sled, to remove to another place, or to put in store for future use. We believe it is one of the good things among the many new inventions.

Messrs. Tibbits & Gordon have specimens of all the varieties, at their extensive establishment, with, in fact, almost everything else in the way of hardware, agricultural tools and machinery, that can be desired. See their card in our advertising columns; and when you wish to buy, see their stock of goods in store.

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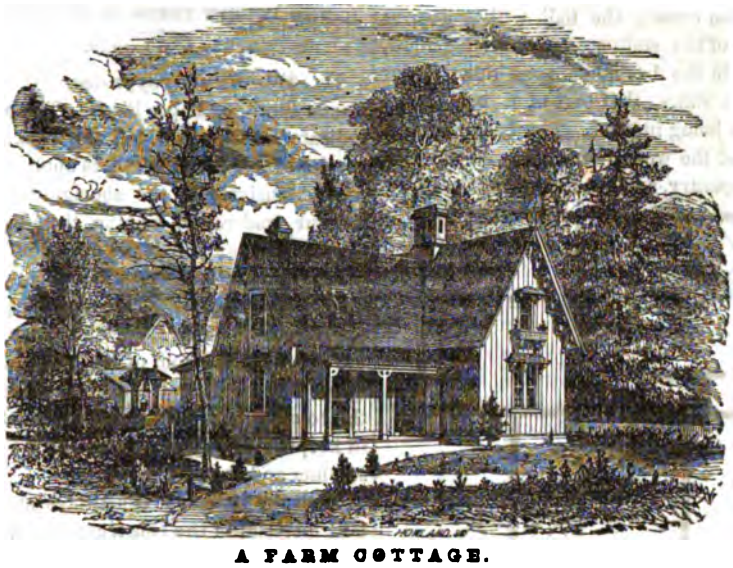

A FARM COTTAGE.

The above beautiful plan for a cottage house, is taken from a work recently published by D. Appleton & Co., of New York, entitled "Village and Farm Cottages," and designed by Cleveland & Backus Brothers,

[FIRST STORY PLAN.]

of N. Y., and Wm. Backus & Co., of Chicago, Architects. It is one of the finest works of the kind we have ever seen, and contains some twenty-five different plans, of neat, tasty, and cheap houses—every way adapted to a new country like this, where people are not yet able to build expensive houses.

It also abounds in excellent suggestions upon the subject of building, and fitting up farm and village establishments, with economy and taste. Its illustrations are beautiful, but we can hardly do them justice on our common power press. We shall insert such of the plans, from time to time, as seem best adapted to our wants. But we would advise all who are purposing to build, to get a copy of the work, and study it. It will a great deal more than pay. The price is $2. It can be ordered postage free, by mail, from the publishers, if not found in the book stores.

The before mentioned firms of architects, are men who understand their business, to a nicety. They lithograph all the working plans, to their different models of houses, and buildings; and consequently can furnish them by mail or otherwise, perfectly correct, and very cheap, to master builders, and others in need of them.

Address Wm. Backus & Co., Masonic Temple, Chicago. Those proposing to erect churches, and expensive houses, will also find them very competent men, to design estimate, or manage the same. We say thus much of them, merely as a tribute to their fine plans and professional skill, which we hardly think is surpassed in America.

EXPLANATION.—The stairs, starting just back of the parlor-door, on the right side of the hall, land on a platform, six feet above the floor, from which they return over the bedroom closet. At the rear of the landing,

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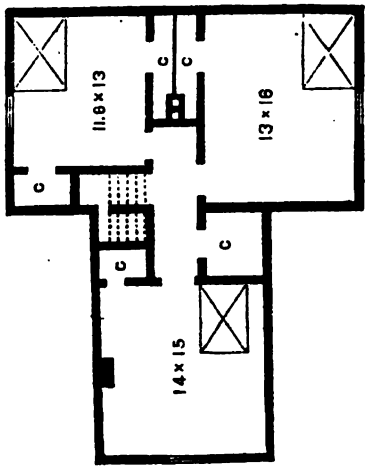
a partition crosses the hall, with a door at the side of the staircase. The cellar flight, starting in the back hall, goes down under the main stairs, that part of it beyond the platform being incased. The back porch is open, and the wood-room is beyond it, with kitchen-pantry, and other conveniences.



[SECOND STORY PLAN.]

In the second story, the stairs land over the partition between the parlor and bedroom. There are two pantries between the chambers at the right of the hall—one for each. There is a small one also in the back chamber beyond the stairs. There is a large closet in the hall for bedding, etc., and a small one in the left-hand chamber. If needful, this room may be divided in the center, and a portion of the hall closet devoted to the front half. The chimneys are of brick, and topped out with the same. The small dormer-windows in the roof are intended for ventilation as much as for light. But they are decorative features also. The window caps are of plank, supported on simple brackets. The front gable window has a flower balcony. The verandah is solid and plain, and is so finished as to show its construction. Sawn brackets of solid plank adorn the gable cornices, while the extended rafters are made to show along the eaves.

This is well fitted for a corner house, the fronts, seen in the engraving, showing on the two streets. In any event, the lot on which it stands should be of good size. No alteration should be attempted unadvisedly.

THE FOREST TREES OF WISCONSIN,

BY I. A. LAPHAM.

No. 87.—*Betula papyracea*, of Aiton—Canoe Birch, or Paper Birch. These names indicate the uses to which the bark of this species of the Birch family is applied. It is used extensively by the aborigines, and by the fur traders, for making their light and elegant canoes; and when peeled off in thin layers, it is a substitute for paper. This bark is also used for many other purposes of ornament and utility; the white man makes use of it for the roof of his rude building, erected at the time of the first settlement of the country, and it is found to be effective in keeping off the rain, as well as the heat in summer and the cold in winter.

With the Indians it constitutes an important material in the construction not only of his means of transportation on the water, but of his wigwam and various untensils. Sir John Richardson observes that it "is an invaluable tree to the population of Ruperts, Land; its bark is indispensable for the construction of their canoes, and also serves for the covering of tents, in localities where the skins of large animals are scarce. Neatly sewed and ornamented with porcupine quills, it is moulded into baskets, bags, dishes, plates, and drinking vessels; in short, it is the material of which most of the light and easily transported household furniture of the Crees is formed. The wood serves for paddles, the frame work of snow-shoes, sledges, &c. In the spring the sap forms a pleasant sweet drink, from which a syrup may be manufactured by boiling."

The Canoe Birch does not extend south into Illinois, but in the opposite direction it is found as far as the 69th degree of north latitude. But it attains its greatest perfection about the shores of Lake Superior, where the bark is used by the Chippewas for most of the purposes above indicated.

The following from Mr. Longfellow's Hiawatha, may interest some of the readers of the FARMER:

"With his knife the tree he girdled
Just beneath its lowest branches,
Just above the roots he cut it,
Till the sap came oozing outward:
Down the trunk from top to bottom
Sheer he cleft the bark asunder,
With a wooden wedge he raised it,
Striped it from the trunk unbroken!

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With this he made a canoe, which

"————"floated on the river
Like a yellow leaf in autumn,
Like a yellow water lily."

No. 38.—*Betula excelsa*, of Aiton—Yellow Birch. This tree is found in the northern and central portions of the State, though much less common than the last, and its bark has none of the more useful qualities of that species. It may be known by the sweet or aromatic taste of the young twigs, and by the bark, which is more rough, of a yellowish color, and does not peel off in thin layers. Emerson says of this tree, that "it has not often been cultivated for ornament, but it has great beauty. In traveling, we sometimes see it on the edge of a wood, with its abundant soft, green, often drooping foliage, between masses of which is seen the gleam of the light bronze trunk with its silver and pearly lustre—showing what might be its effect if introduced in ornamental woods. The wood of this tree is applied to numerous uses. Bending readily, it is particularly adapted to the making of the posts and bars of chairs. It is used for the staves of small and inferior casks, for boot-trees and for joists and bedsteads. It is valuable as fuel."

39. *SALIX FLUVIATILIS*—RIVER WILLOW.

No. 39.—*Salix fluviatilis*, of Nuttall—the River Willow. This species of Willow is the only one that here assumes the size and importance of a tree. It was first described and distinguished from the long leaved Willow, (*S. longifolia*, Muhl.,) in the first volume of his North American Sylva. It is often only a low shrub along the margin and on the islands of the Mississippi river. It is one of the most abundant trees along the principal rivers of the west. It is the first to take possession of the loose sand bars when left dry by the retiring waters, and hence it is often called "Sand-bar Willow." It is to the light feathery foliage of this abundant tree that the upper Mississippi owes much of its beauty. The roots do not seem to penetrate the soil in such numbers as to prevent the wear of the rapid current of the river. The wood is used as fuel on board the steamboats now so numerous on the great Father of Waters, but does not seem to possess much value.

The figure represents a leaf, the capsule when mature, and also after it is open, showing the cottony seeds.

No. 40.—*Populus tremuloides*, of Michaux—Aspen. This tree is small and more curious than useful; the curiosity about it consisting in the constant tremulous motion of the leaves, which are set on slender, flattish petioles, so as to be moved by the gentlest breath of wind—as some rascally poet says,

"————like women's tongues
Which seldom cease wagging!"

The soft light wood of the Aspen has too little strength to be of any utility. The tree is usually found bordering the woodlands and in small patches along the margin of the prairies. It is quite an abundant tree in Wisconsin, never however attaining any considerable size. The wood may be used as fuel where no better can be obtained, and the ashes are said to afford an unusual quantity of potash.

No. 41—*Populus grandidentata*, of Michaux—the Large-toothed Aspen. This poplar takes its name from the coarseness of the teeth of the large roundish-ovate leaves, by which it is readily distinguished from the last. It grows in the same localities and is often confounded with it by careless observers; but the slightest comparison of the leaves will show the difference between the two. Like that, its wood is light, soft, and easily broken. It is used for fuel, but is of inferior quality; when dry it burns rapidly, but affords little heat. This species of Poplar attains the greatest size—and is used for rails, timber, &c. It is said to be more durable than the other kinds of Poplar.

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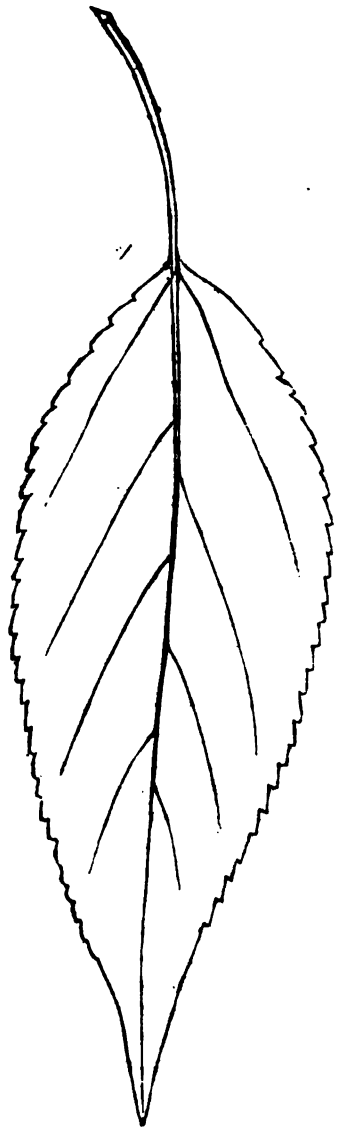
No. 42.—*Populus arigulata*, of Aiton—Angled Cottonwood. This is the common Cottonwood of the Mississippi river and its tributaries, but as this name has been applied to other sorts of Poplar, it loses its distinctive signification. The cottony down accompanies the seed of all the Poplars, but perhaps more abundantly in this than the others. The seeds are very numerous, and are floated down the rivers, mixing with the sediment that covers the banks and bars, so that these places when left bare by the fall of the waters, are soon covered with a growth of young Cottonwood. The seeds are so durable, when thus deposited, that when brought up from great depths they still possess the power of germinating.

There are other kinds of Poplar with angular stems, but they are distinguished from the present species by having resinous and aromatic buds, like the Balsam Poplar, and the Balm of Gilead Poplar, while the buds of this species are destitute of aromatic gum. The wood is soft, white, and has but little value; though it is used with other wood by steamboats on the Mississippi river. The angled Cottonwood does not appear to extend up the Mississippi river beyond Lake Pepin.

No. 43.—*Populus Candicans*, of Aiton—Balm of Gilead Poplar. This is a favorite ornamental tree, both on account of its beauty as a tree, and of the fragrance of its opening buds in the spring, from which it derives its common name. It grows naturally along the margin of lakes and rivers in Wisconsin, whence it may be obtained and transplanted to the place it is intended to adorn. It is very hardy, and will continue to grow, under very bad treatment—an essential quality in most cases! The large leaves give it a coarse appearance to the eye, but cause a very dense shade. It is of rapid growth—and should be more often seen in the streets of our cities and villages.

No. 44.—*Populus balsamea*, of Linnæus—Balsam Poplar. Milwaukee is just on the southern limits of this tree; only a few small specimens having been observed on the lake and river banks near that city. It is more abundant in the northern portions of the State. It resembles the last species in the agreeable odor of the buds in the spring, but wants its vigorous growth, and great size; and the leaves are much smaller and narrower. Like most of the Poplars, the wood possesses very little value in the arts of life. The figure represents a leaf of the natural size.



44. *POPULUS BALSAMEA*—BALSAM POPLAR.

The Willows and Poplars are classed together in the same natural family, called *Salicaceæ*.

No. 45.—*Platanus occidentalis*, of Linnæus—Sycamore. At the east this tree,

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with its white bark and broad leaves, is called Button-wood, while at the west it is almost universally known as the Sycamore. Its proper name, however, is the American or Western Plane Tree.

In Europe a species of Maple is called Sycamore, and the use of the same name here for a very different tree is apt to lead to confusion. The south part of Wisconsin is the extreme northern limit of the Sycamore. It attains its greatest dimensions in the valley of the Ohio river. The low bottom lands of that stream, annually overflowed with water, appear to be the proper *habitat* of this tree. Until the discovery of the immense coniferous trees of California and Oregon, the Sycamore was regarded as the largest tree in the United States, attaining a circumference of forty-seven feet.

The wood is used for cabinet work; the grain is irregular, giving it a fine appearance when polished. It would be much more extensively used for this purpose, but for the abundance and cheapness of other more esteemed kinds. It is becoming a very common shade tree along the streets of the eastern cities and towns, and appears to be much admired. The growth is rapid; it bears transplanting well; and for supplying the prairie lands with fuel, shade, &c., in the shortest time, it is said to be inferion only to the Locust. As the Sycamore is not attacked by the borer, it may be deemed the most valuable of the two for this purpose. It may be propagated by sowing the seed in the spring, or by cuttings, The very young seedlings should be protected from the heat of the sun.

HOW MUCH DEPENDS ON A LATCHET.

Our farmer friends should remember a quotation, which we find here from M. Say, showing how much depends on a latchet:

"Being in the country, I had an example of one of those small losses which a family is exposed to through negligence. For the want of a latchet of small value, the wicket of a barn-yard leading to the fields was often left open. Every one who went through drew the door to; but as there was nothing to fasten the door with, it was always left flapping; sometimes open and sometimes shut. So the cocks and hens, and the chickens, got out and were lost. One day a fine pig got out and ran off to the woods; and after the pig ran all the people about the place—the gardener, and the cook, and the dairy-maid. The gardener first caught sight of the runaway, and hastening after it, sprained his ankle; in consequence of which the poor man was not able to get out of the house again for a fortnight. The cook found, when she came back from pursuing the pig, that the linen she had left by the fire had fallen down and was burning; the dairymaid having, in her haste, neglected to tie up one of her cows, the cow had kicked a colt that was in the same stable, and broken its leg. The gardener's loss of time was worth twenty crowns, to say nothing of the pain to be suffered. The linen which was burned, and the colt which was spoiled, were worth as much more. Here, then, was caused a loss of forty crowns, as well as much trouble, plague and vexation, for the want of a latch which would not have cost threepence."

M. Say's story is one of the many examples of the truth of the old proverb: "For want of a nail the shoe was lost, for want of a shoe the horse was lost, for want of a horse the man was lost.'

THE CHILDREN THAT WENT WEST.

About three weeks ago a company of poor street children started for the West, under the auspices of the Children's Aid Society. Their destination was Racine, Wisconsin, and in that place and vicinity they have been provided with the best of homes. On the cars and steamboats, and wherever they stopped, they attracted much attention and found many friends.

At Oswego, clergymen and others met them at the depot, and invited them to their houses for refreshments. They afterwards assembled in one of the churches, and Messrs. Macy and Tracy, who had the children in charge, entertained a considerable audience until the time of departure, receiving as they left a handsome donation in money.

The liberal hospitality of the people of Racine deserves a particular acknowledgement. When the party arrived there, they found all their wants had been anticipated by a committee of ladies, through whose efforts a large house was in readiness for their occupation—carpeted and amply supplied with beds and provisions. Every one seemed interested in the welfare of the New York children. Clergymen addressed their people in their behalf; children called to see them and invite them to the Sunday Schools. In a very short time they were all distributed in good families, and there were many applicants for a boy or a girl that could not be supplied. [N. Y. Herald.

This is all right; New York has multitudes of poor, and often worse than orphan children—swarming in her streets, and starving and freezing for want of the barest com-

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forts of life. Nobody will own them, and few care for them. When they enter a store, an office, or a hotel, to beg, they are hustled out as roughly as so many pigs. We have often seen it, and had our humanity moved by the sight.

Transplanted to the great and *free* West, the whole scene is changed; New York is relieved of the burden. Instead of staying there and coming up a new crop of theives and prostitutes, they are adopted into quiet, industrious and happy families—sent to school, taught to work, and well clothed and fed. A few years pass away, and they are the young men and women upon the active stage of life—as likely to be Governors and Congressmen, or their wives, as those born upon the soil, with a silver spoon in their mouths.

We repeat, it is all right. Every healthy child of ten years old, that is sent to this State, is worth at least $500 to the State, for the reason that it has cost that sum to raise him or her up to that age. From that time he or she is able to earn a living, and in a short time to earn a surplus to enrich the State.

We should think a city as Dough-facey as New York, and as deeply involved in the Slave trade, would send such children South, and sell them for a fair value. They are no better, and many of them not much whiter, than thousands that are annually sent from Virginia to a Southern market. If Slavery is such a humane and divine institution, we don't see what there would be wrong in it. They are worth at least $500 each to Wisconsin, and we hope they will be brought here at the rate of a thousand a year, until every childless household in the land has at least one to take the place of a pet lap dog, or kitten. Send them on. EDS.

CORNS.

Never let anything harder than your finger nail touch a corn; pairing it as certainly makes it take a deeper root, as cutting a weed off at the surface. The worst kind of corns are controlable as follows: Soak the feet in quite warm water for a half an hour before going to bed, then rub on the corn with your finger, some common sweet oil. Do this every night, and every morning repeat the rubbing in of oil with the finger; bind on the toe during the day two or three thicknesses of buckskin, with a hole in the center to receive the corn; in less than a week, in ordinary cases, if the corn does not fall out, you can pinch it out with the finger nail; and weeks, and sometimes months will pass away, before you will be reminded that you had a corn, when you can repeat the process. Corns like consumption, are never cured, but may be indefinitely postponed.—The oil and soaking softens and loosens the corn, while the buckskin protects it from pressure, which makes it, perhaps, to be pushed out by the undergrowth of those parts. [Hall's Journal of Health.

For the Farmer.

A SUITABLE SHRUB FOR HEDGES.

FRIEND POWERS—Having arrived at my home, I now seat myself for the purpose of fulfilling the promise I made you—whilst on my passage up the Mississippi from Dunleith to La Crosse—respecting some peculiarities of the Barberry, a shrub growing wild from Canada to Virginia, and which I thought would be a suitable shrub for hedges, on your vast and fertile prairies.

Whilst traveling through your State and the State of Illinois, I noticed in several places, that the industrious farmer had, in consequence of the scarcity of fencing material, undertaken to form a hedge of the Osage Orange, a great part of which had been killed by the severe cold of our past winter; and not seeing any that had become so matured as to answer the purpose for which it was intended, I could not help but think that it must prove a failure—principally on account of its being a native of a more southern climate—it would not endure our cold winter, and could any shrub be discovered indigenous to our northern climate, that it would take its place. It would prove an inestimable blessing to the western farmer. This, I think, may be found in the Barberry—as it is a tough, hardy shrub, growing on rich land from six to ten feet high, about the right hight for fence, without the necessity of cropping every year, and thickening up every season, so that in five or six years time it would seem almost impossible for a squirrel to get through it.

Whilst visiting my father's garden, in Vt., some two weeks since, I examined some of the bushes that came from the berries that were planted some twelve years since, and whilst beholding them, I was forcibly struck with their peculiar adaptation for hedging;

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about eight feet in hight, and covered with prickles—beautiful in appearance, and detested by all manner of four-footed beasts—not inclined to spread, but thickening up from the roots something like the currant, only somewhat thicker—bearing a beautiful red berry in the fall, and never known to winter-kill.

Its fruit is acid, and makes a beautiful febrifuge drink for invalids; also a good kind of preserves for the table. The bark is used for coloring a beautiful yellow, and it is also used as a remedy for jaundice. It grows rapidly on good soil, and I think in four or five years would be sufficiently matured to form a good hedge.

The only objection I have heard presented as yet, (beside the vulgar error of supposing it to be injurious to wheat,) is its liability of spreading from birds eating the berry and depositing the seeds over the land.

But, from several bunches of the bushes which bear full every year, in the garden above referred to, not a single instance of the kind has happened during the twelve years they have been there. Along by the sea shore where it grows wild, it does not grow so thrifty, and seems more inclined to spread than on richer ground and farther from the salt water.

With these few hints I close, hoping that if any one has tried it, and found it not suitable, or if any one can present any suitable reasons why it should not be tried, that they will make them known through your truly valuable periodical.

Yours &c., H. W. Leach, M. D.

Norwich, Conn., June 19 1856.

A TEMPLE TO FRIENDSHIP.

BY THOMAS MOORE.

"A temple to friendship," said Laura, enchanted,
"I'll build in this garden—the thought is divine!"
Her temple was built, and she now only wanted
An image of Friendship to place on the shrine.
She flew to the sculptor, who set down before her
A Friendship, the fairest his art could invent;
But so cold and so dull, that the youthful adorer
Saw plainly this was not the idol she meant.

"Oh! never," she cried, "could I think of enshrining
An image, whose looks are so joyless and dim;—
But yon little god, upon roses reclining,
We'll make, if you please, sir, a Friendship of him."
So the bargain was struck; with the little god laden
She joyfully flew to her shrine in the grove;
"Farewell," said the sculptor, "you're not the first maiden
Who came but for Friendship and took away Love."

RELATIONS OF THE EAST, AND WEST.

We are indebted to Hon. Simon Brown for a copy of the Agricultural Report of Massachusetts, for 1855; and among other interesting articles, we find an elaborate address, delivered before the Franklin Society, by the Hon. George S. Bontwell, (we believe, an Ex-Governor of the Bay State,) under the above title, and wholly devoted to the *easy* task, of showing that on the whole, the West is no great of a country, and rather inferior in its products, and people, to New England.

We would like to quote whole pages for the edification of western readers, if our space would permit; but suffice it for the present to say, that he assumes the West, from Ohio to the Rocky Mountains, to be so level and monotonous a country, as to be nearly destitute of all grandeur, boldness, or beauty of scenery, and consequently barren in its productions, of all the higher grades of intellect, taste, or fancy—so fertile in soil as to beget indolence and barbarism, at least in two or three generations. Further, he goes on to show, satisfactorily, that this barbaric idleness has already so far taken possession of the inhabitants, that notwithstanding their rich soil and level country, the States of Massachusetts and Vermont average almost twice as large a product, to each person, as the States of Ohio, Illinois, and Wisconsin.

Now this would be all very fine, and logical, and conclusive in support of his theory, if it were only correct; but, unluckily for his cause, it is not; and what is worse, it hardly seems possible that so learned and experienced a man, as he evidently is, and as an Ex-Governor of so enlightened a State as Massachusetts ought to be, could have unknowingly committed so great a blunder.

After enumerating every item of income in the old States, he simply takes up the same class of items in the new States, without saying *ever* a word about another class of labor, and product, which in every new country must and does engross a large share of the labor and productive industry of the population—to wit: the erection of houses and buildings of all sorts, from the palace to the log-cabin, the pig-pen and hen-coop; the clearing and breaking of lands, and ditching and fencing the same; the planting of orchards, the making of roads and public conveniences of every kind.

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These all urge themselves, first and foremost, upon the attention of the settler in the country; and it is not too much to assume, that at least one half of the time, of the whole population, is employed in thus making up the country, as one may say, for the first five years; and at least one-fourth for the next ten years; while in the old States, it is notorious, that there is little or nothing of the kind to be done.

Further it may be urged, that at least one-tenth of the population, in Wisconsin and Illinois in 1850, were new-comers, who had but just arrived in the State during the year, and were counted in, but had had time to raise or produce nothing.

Again, a large amount of our population were foreign born, and many of them recent importations—thrown almost naked, and wholly inexperienced, into an entirely new country, without the accumulated capital of an old State to set them to work.

When all these matters are taken into account, and proper allowances made for the almost uniform poverty, and want of capital with which to work to advantage, on the part of the settlers in an entirely new country; together with the thousands of inevitable delays, and losses, incident to such a transition state of things. And when proper credit is given for the vast amount of labor bestowed upon permanent, but not immediately productive improvements, we think we are justified by facts, in concluding that the value of the productive industry of Wisconsin, instead of being only $40, is at least equivalent to $100 per capita, as compared upon a fair and just basis, between a similar class of inhabitants, in Vermont and Massachusetts.

If these conclusions are correct, and we believe they are, it certainly very materially changes the aspect of our friend's argument in favor of the always rough, and now worn out hills of New England, and would still seem to warrant the young and enterprising but poor man, or the rich one if he chooses to look west for an improvement of his fortune.

We speak the more confidently on this matter, for the reason that we have spent over twenty years of our life on a good Vermont farm; and about the same amount in Wisconsin; hence we think we know something of the subject, by our own actual experience.

We think we know this much, at least, that Wisconsin in the first ten years of its infancy, without capital, without machinery, without work-shops, without common roads, and without a mile of railroad, has produced larger results of labor, in proportion to its population, than Vermont or Massachusetts, in their ripe maturity, with their surplus capital and immensities of labor saving machinery, in every city, village and hamlet, with a net-work of completed railroads to stimulate production, and enhance to the utmost the values of their products.

Well, if this was the fact in the green tree, what may it be in the dry? Wisconsin in the six years that have elapsed since the taking of the census of 1850, has doubled in population, has begun and completed more than 500 miles of railroad, which is now in operation and earning on an average, from 15 to 20 per cent. net. Besides 500 miles more under contract, and rapidly advancing to completion.

She has in that time redeemed a wild country larger than Vermont, or Massachusetts, from the savage and the wilderness, and made it up into fine productive farms, sparkling all over with villages and young cities. Her wheat crop has arisen from a little over four millions of bushels in 1850, to at least twelve millions the present year; and many others of her productions have increased in nearly the same ratio.

Her real estate, on account of the labor bestowed upon it, and upon her railroads and public works, has advanced from its then estimated value of forty-two millions to at least two hundred millions of dollars—all of which we think will be justified, and probably more too, by the rapidly approaching national census of 1860. Wait, my worthy friend, and see how that will compare Wisconsin and Vermont, or Illinois and Massachusetts, either in population or ratio of individual production.

Against such progress here in the West, we will see by the same census, that Vermont, and may be Massachusetts, has stood still, or perhaps retrograded, in everything but intellect and sterling merit. Each recurring census will exhibit similar comparative facts, that cannot be argued away, even

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by the subtle logic of New England. Facts that prove conclusively the correctness of the poet's prediction,

"Westward the Star of Empire takes its way."

Railroads are breaking down the barriers of distance, until two days time takes us from Madison to Boston; consequently everybody becomes traveler, and more especially those who are not quite suited at home. And when the farmer of New England coming West, perhaps on a mere pleasure excursion, or to visit a friend, and sees our fine rich lands, spreading out on all sides, at moderate prices, and sees withal, how readily labor-saving machinery is applies to perform the most arduous toil—how a man and a span of horses often does the work of ten ordinary men—then, friend Boutwell, he is in particular need of a copy of your address in his pocket, for reference, to keep him from falling in love with the West—especially as he further reflects how fast these lands will rise in value, compared with the receding prices of the East.

No gentlemen, friends and brethren of New England, this mania for coming West is founded on natural principles. In this age of railroads, population seeks its level, as naturally as water, and gravitates towards its interest. Stay the Niagara, or stop the tides from coming into Boston harbor; but don't be so fool-hardy as to try to stop the most enterprising of your sons, and the most beautiful of your daughters, from coming West, by mere Fourth of July orations, or County Fair addresses.

Upon the point of idleness and intellectual degeneracy, assumed in consequence of the flatness and fertility of the western country, we shall not now dwell, further than to say, that so far as our observation has thus far gone, we can testify, that we have never known a more industrious community, as a whole, than those in which we have lived in Wisconsin; and, as to intellect, we think it is usually conceded, by those who come among us, that we are tolerably *cute*, in all every-day affairs, at least, and if we do not prove as eminent in scholarship and belles lettres by the time we are as old in settlement as Vermont and Massachusetts, why then we will concede this point in favor of New England, and endorse our friend Boutwell's advice to all young men who would be highly intellectual, to stay in New England, from generation to generation.

A CHRONICLE OF COLD WEATHER.

In the year 301, the cold was so intense in Europe, that the Black Sea was frozen entirely over.

In 401, the Pontus Sea, and the sea between Constantinople and Scutari in Turkey, were entirely frozen over.

The Danube was frozen over in 462, so that a whole army crossed on the ice.

The Black Sea was again frozen over in 765, and the snow drifted to the depth of 50 feet.

Carriages crossed the Adriatic Sea, or Gulf of Venice, in 859, and in 860 the cold was so intense that cattle froze to death in their stalls. The Mediterranean Sea was so thickly frozen over, that it was passable for carriages and horses, and merchandise was transported across it on the ice.

1133. This year the river Po, in Italy, was frozen from Cremona to the sea; wine burst the casks containing it, and the trees split with a loud report.

1216. The river Po was frozen to the depth of 16 feet.

1234. The Mediterranean was again frozen over; and a whole pine forest was killed by the cold.

1282. This year the snow was so deep in Austria that the houses were entirely buried beneath it, and many persons perished.

1292. The Rhine was frozen over, and the snow is represented as being of an enormous depth.

1323. The Baltic Sea was frozen over so as to be passable for six weeks.

1344. All the rivers in Italy were frozen over.

1349, 1392, and 1408. The Baltic Sea was frozen over in each of these years.

1384. The Rhine and Gulf of Venice were frozen over.

1423, 1426, 1459. In each of these years the traveling from Lubec to Prussia was performed on the ice.

1620. The sea between Constantinople and Iskodar was passable on the ice.

1670. The cold was intense throughout Europe.

1681. This year the cold was so intense as to split whole forests of oak trees.

1690. Scotland this year was visited with an awful snow storm, which lasted *thirteen* days and nights, during which time nine-tenths of the sheep were frozen to death, and many shepherds lost their lives.

1692. Wolves came into Vienna, and attacked men and women, owing to the intense cold and hunger.

1729 and 1730. In one of these years an-

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other snow storm visited Scotland, in which about twenty thousand sheep and many shepherds were lost—"by a single day's snow."

1776. This year the Danube was frozen over *five feet thick* below Vienna.

Scotland was the scene of another terrible snow-storm in 1794, which is the most extraordinary one of which there is any record. In one single night snow fell to the depth of eight or ten feet, and in some places the most lofty trees were entirely covered. By this one night's storm seventeen shepherds lost their lives, and thousands of sheep, besides other animals, were destroyed. One farmer alone lost fourteen hundred sheep. After the storm had somewhat disappeared, there were found collected together (by its violence) in one spot, the dead bodies of two men; one woman, forty-five dogs, three horses, nine black cattle, one hundred and eighty hares, and one thousand eight hundred and forty sheep.

The above contains the most remarkable accounts of severe weather in the old world; and some of them could hardly be believed were they not well authenticated by the histories of the times. They contrast strangely with the weather of recent times there, and of the present, in the new world, until the last cold winter.

CHECKED PERSPIRATION.

There are two kinds of perspiration, *sensible* and *insensible*. When we see drops of water on the surface of the body as the result of exercise, or subsidence of fever, that is *sensible perspiration*, perspiration recognized by the sense of sight. But when perspiration is so gentle that it cannot be detected in the shape of water-drops, when no moisture can be felt, when it is known to us only by a certain *softness* of the skin, that is *insensible* perspiration, and is so gentle that it may be checked to a very considerable extent without special injury. But to use popular language which cannot be mistaken, when a man is sweating freely, and it is suddenly checked, and the sweat is not brought out again in a very few moments, sudden and painful sickness is a very certain result.

What, then, checks perspiration? A draft of air while we are at rest, after exercise, or getting the clothing wet and remaining at rest while it is so. Getting out of a warm bed and going to an open door or window, has been the death of multitudes.

A lady heard the cry of fire at midnight; it was bitter cold; it was so near, the flames illuminated her chamber. She left the bed, hoisted the window, the cold chilled her in a moment. From that hour until her death, a quarter of a century later, she never saw a well day.

A young lady went to her window in her night clothes to look at something in the street, leaning her unprotected arms on the stone window-sill, which was damp and cold. She became an invalid, and will remain so for life.

Sir Thomas Colby being in a profuse sweat one night, happened to remember that he had left the key of his wine cellar on the parlor table, and, fearing his servants might improve the inadvertence and drink some of his wine, he left his bed, walked down stairs, the sweating process was checked, from which he died in a few days, leaving six millions of dollars in English funds. His illness was so brief and violent that he had no opportunity to make his will, and his immense property was divided among five or six day laborers who were his nearest relatives.

The great practical lesson which we wish to impress upon the mind of the reader is this: When you are perspiring freely *keep in motion* until you get to a good fire, or to some place where you are perfectly sheltered from any draft of air whatever.

[Hall's Journal of Health.

THE POISON STRYCHNINE.

This drug, which has lately become so notorious for destroying the lives of human beings—as in the case of the infamous Dr. Palmer, recently executed in England—is a most deadly organic poison. A dog has been killed with the sixth part of a grain of it, and a human being with less. When introduced into the stomach it acts with fearful energy, causing lock-jaw immediately, violent spasms, and death in a few minutes. It is odorless, but so intensely bitter as to be perceptible to the taste when one part is diluted in a million parts of water. The composition of strychnia is carbon 44, hydrogen 25, oxygen 4, nitrogen 2 equivalents. It is colorless, and forms soluble crystalizable salts. It is an alkaline base, and is extracted principally from the *strychnos nux vomica*. The tree from which it is obtained is of moderate size, and grows in several parts of the East Indies and the island of Ceylon. Its fruits are large orange-colored berries, the pulp of which is the favorite of many birds. The seeds contain the deadly poison. They are flat and round, about an inch in diameter, and gray in color. These seeds were used as a medicine, and as a poison, by the Hindoos, long before they were known in Europe. Many of the natives of Hindostan often use it as people use opium. They commence with taking the eighth of a nut a day, and gradually increase their allowance to an entire nut, which would be about 20 grains. If they eat it directly before or after food, no unpleasant effects are produced; but if

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they neglect this precaution, spasms are the result.

The bark of the tree is also poisonous, and from its resemblance to Angustura or Cusparia bark, a tonic medicine imparted from South America, caused a great deal of alarm and excitement in Germany, in the early part of this century, by being mixed with that bark.

No sure antidote has yet been discovered for this poison, but some chemists have attained to great skill in detecting it, when administered as a poison. The following is Dr. Thompson's method of detecting the one-thousandth part of a grain:

Having placed a drop of strong sulphuric acid on a piece of glass, add to it a small quantity of the suspected substance, and stir the whole together, so as to favor solution; then sprinkle over the mixture a little powdered bichromate of potash, and gently move a glass rod through the fluid. If strychnia be present, a violet color of considerable beauty will be almost immediately produced, which, after a few minutes, will fade into a reddish yellow, but may be renewed by the addition of more bichromate, so long as any strychnia remains undestroyed in the mixture. In this way the thousandth part of a grain of that alkaloid may be made to yield a very decisive indication. The points to be noticed are, that sulphuric acid alone produces no apparent effect, and that the action begins at once round each particle of the bichromate, so that if the glass be held in a vertical position, streams of a violet colored fluid may be seen to flow from each particle; and if at this time the whole be slowly stirred, the entire bulk of the fluid will speedily assume the same characteristic tint. [Scientific American.

PRESERVING FRUIT BY HERMETICALLY SEALING.—First, select good fresh fruits or vegetables; stale and fermented articles can never be preserved. Vegetables decomposing quickly, such as green corn, green peas, asparagus, should be preserved within six hours after being picked, particularly in hot weather. Berries always within twenty-four hours. Peaches, quinces, pears, apples, should be pealed, and the seeds removed before preserving.

Vegetables should be partially cooked first —such as corn, peas, and tomatoes should be boiled a half hour; asparagus a quarter hour. To the vegetables, add a half pint of the water they are cooked in to the quart.

Fill the can with ripe fruit, adding, if desired, a little sugar—simply enough to make the fruit palatable, and set in a vessel of water (warm or cold.) Let the water boil and continue boiling until the *fruit is well heated through*—say for half an hour. Direction has been given to simply let the water boil, but such direction is defective, as at this time the fruit in the center of the vessel will be scarcely warmed. Should the vessel be then sealed, fermentation will take place. *The heat must thoroughly penetrate the contents of the vessel.* As soon as the fruit is sufficiently heated, seal the can, and the work is done.

Another way is to make a syrup of two pounds of sugar for every six pounds of fruit, and let it boil ten minutes. Fill the cans, and seal up hot. Some make a syrup of half a pound of sugar to every pound of fruit—and some only a quarter of of a pound of sugar to a pound of fruit—while some use no sugar at all.

To keep peaches, pear and cut them up. If thrown into cold water they retain their firmness and color. Heat them in cans as above—or boil them ten minutes in a syrup. In this way, strawberries, raspberries, cherries, plums, peaches, &c. &c., may be kept for any length of time, in the same condition that they were sealed up, with their flavor unchanged. For small fruit it is best to make a syrup without water, and boil the fruit in it only for a few minutes.

Tomatoes should be boiled and the skins taken off, and then placed in a kettle and brought to a boil, *and kept so while filling the cans.* [Ohio Cultivator.

STEAM POWER DONE FOR.

The London Morning Chronicle announces that a great experiment was recently tried at Vincennes, in the presence of Gen. Lahitte and the officers of the fort. The Chronicle says:—"The secret of compressing and governing electricity is at length discovered, and that power may therefore now be considered as the sole motive henceforward to be used. A small mortar was fired by the inventor at the rate of a hundred shots a minute—without flashing, smoke, or noise. The same power can, it seems, be adapted to every system of mechanical invention, and is destined to supersede steam, requiring neither machinery nor combustion. A vessel propelled by this power is said to skim the water like a bird, and to fear neither storm nor hurricane. The inventor has already petitioned for a line of steamers from L'Orient to Norfolk, in the United States, which passage he promises to accomplish in forty-eight hours!"

Just think of it: skimming over the ocean at the rate of sixty-two miles per hour. Gen. Lahitte, you are the man for America if you can do this. But although Jonathan is almost a disbeliever in impossibilities, he must plead incredulity to the above until the General makes his first voyage.

[Scientific American.

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STOCK REGISTER.

THE CULTURE OF DOMESTIC ANIMALS.

SHEEP.

1. In America, we cultivate the Sheep only for the fleece, and the flesh. In addition to these, the milk of these animals, and also their skins, are objects of much importance, in certain quarters of the globe. There is probably no animal whose value is comparable to the sheep, that can be supported at so little cost. There is hardly any kind of ordinary weed that they will not browse on; and judiciously used, a moderate sized flock might almost pay for their keep on an extensive farm, by the value of their services in destroying weeds, and keeping the plantation clean. They are extremely fond of the tender and bitter weeds, and slightly aromatic seeds, of that pest, the *Rag weed;* they devour the blossom of the Spanish needle; they are fond of the tender shoots of briers, and will trim up the white blossom weed of our meadows, the iron weed of our pastures, and even the common burr that is so hateful to nice farmers. The mullen, the dog-fennel, the thistle, and I may add the *red clover*, are the only things they seem to avoid, as far as possible. In large portions of our country, winter small grain is sown after corn, during the three autumn months; in which case, a flock of lambs, or even of grown sheep, of the small, fine wooled varieties, grazing the cornfield before it is plowed for the winter grain, is a luxury to the sheep, a benefit to the ground, and in many ways an economy to the farmer.

THE SHEEP IS VALUABLE IN ALL COUNTRIES.

2. The most natural condition, perhaps, of the sheep, in its state of domestication, is on thin and elevated and *cheap* lands. But its culture is simple and remunerative, under all circumstances in which it has been found to exist. The wonderful applications of machinery, and skilled labor, to the preparation of various productions of the earth, which come in competition with wool, especially to cotton, have materially changed the *commercial* aspect of all these matters; but I have no idea of going far in that direction. Sheep are for all conditions of man, and for nearly every region of the globe. They are for the poorest of all who till the soil; they are capable of being expanded into enormous wealth. The mountain, the prairie, the pasture, the heath, the down, the wold, the forest, the park, the lawn, the meadow, even the grain field; in every place the sheep finds a home, where man has taken the first step towards civilization. I confess, I do not understand how any one who resides in the country, on property of his own, can consent to do without the pleasure to be derived from the culture of sheep, even if it were an expense, instead of a profit, to him.

COMMON SHEEP—GESTATION—LAMBS, &C.

3. The common sheep, which we find in nearly every portion of the United States, is a mixed, degenerated, and very inferior animal; the wool coarse and scanty, and inclined to shed off every spring, like hair; the flesh hard and dry, and with a taste like wool. In the mountainous regions of the Middle States, the flesh is better than the average; and, in midsummer, is sometimes fat and juicy. Besides these sheep, which constitute an immense majority of the sheep of the country, there are three distinct races in addition, and very numerous grade sheep, made of these three races, crossed on each other, and on the common sheep of the country. All sheep bear their young five calendar months, as is commonly said more accurately 21 weeks, with a margin of one week on either side. By the way, this want of positive uniformity, in the period of gestation, is a very curious thing, and applies to every creature that bears young, hitherto carefully observed by man, from his own species downward. As a general fact, ewes have young but once a year; if, however, they do not give suck to their young, they will bear twice. Ordinarily, they have one lamb at a birth; it is very rare for the fine wooled sheep to exceed one; the common sheep, and the coarser wooled sheep, generally, frequently produce twins; I have known three lambs at one birth very often, and occasionally four. The fine wooled sheep do not shed their wool, and are much longer lived than other varieties. They live fifteen years, under favorable circumstances, which is at least one-third more than the average life of other sheep; and the gradual loss of their front teeth, by which some tolerable idea may be obtained of the age of sheep, occurs much later in life with them than with other varieties. In the middle States, lambs ought to come during about 60 days, commencing, as well as we can determine, immediately after the vernal equinox. They are extremely tender at birth, and inattention at that period is fatal.

THE BEST VARIETIES—HOW TO ASCERTAIN THE FELTING PROPERTIES OF WOOL.

4. A few words about each of the most important varieties: They are commonly spoken of as fine wooled, middle wooled, and long wooled, which suits well enough for general description. The Spanish sheep, commonly called *Merino*, but distinguished in its native country by various names, and into various classes, is the common ancestor of all the fine wooled sheep in this country. The German, commonly called Saxon, is only a very carefully cultivated variety of the Spanish sheep; the French, chiefly, if not

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entirely Rambouillet, are another of the same general description. At present these three varieties differ a good deal; but I speak of them together. Taken altogether, this is the most important variety of sheep that exists. Its flesh is purer, finer and sweeter; its fleece, though not as abundant as some, is very far superior to all others; its life longer; its keep cheaper in proportion to its products; the cost of a moderate flock of them, on a moderate estate, is hardly perceptible, if they are properly used, and the products, in the way of fleece and flesh, by no means unimportant. As to their wool, I give a single hint; with a small eye-glass, count the number of hairs in a natural lock of wool, then count the number of curls in the seperate hair; the latter gives you the felting property of the wool; the former its fineness as compared with other samples. After that, the sheep that has most skin on his body, and most wool on his skin, is the sheep you want; and if you will observe, you will see immense differences in both respects, among sheep of the same blood and size.

COTSWOLDS AND SOUTHDOWNS.

5. Bakewell, Dishley, and Cotswold, are one and the same thing, just as if we said Colling, Teeswater, Durham; Bakewell is a man, Dishley his residence, Cotswold the sheep. Oxfordshire sheep and Leicestershire sheep are so far the same thing as Cotswold, as Saxon and French Merino are the same as Spanish sheep; indeed, more so. Southdown sheep, called with us middle wooled, as all those I have just named are called long wooled, are, like the Cotswold, a distinct variety of sheep; both varieties are peculiar to England. The black-faced, black-legged variety, with but little wool, and that of moderate fineness, were found originally chiefly on the *downs*, or open plains, such as Salisbury Plain, in the *south* of England, and hence their name; the large, white variety, with very long and very coarse wool, suited for combing and pulling, but utterly unfit for carding, were found originally on those *wolds*, or lofty, open regions, forming part of the Chiltern hills, in Central England, and hence their name, too, Cotswold. Both of these varieties of sheep, are without horns, are very thrifty, grow large, get extremely fat, and are *fine* to sell. The flesh of the Southdown is considered better than that of the Cotswold; the fleece of the latter is double at least—sometimes triple that of the former. Both sorts, as well as the cross between them, are fine looking animals, and are prolific, unless they are permitted to get too fat, which they are apt to do. As a cross upon our common sheep, they increase the carcase, and make most singular mixtures of wool. It is far better to keep them pure, or cross them only together. [Ohio Farmer.

HORSE SHOEING.

How many horses, valuable horses in many respects, are spoiled by having defective fore-feet. The general defect in the fore-feet is called "pinched," or contracted feet. This makes the animal tender forward, liable to fall when going down hill, and consequently unsafe.

When the forward feet of the horse are defective, his usefulness on the road is much impaired; and in fact there is no comfort or safety in using such a horse.

What causes tender feet? The most common cause is bad shoeing, with improper care of the animal. There are few good horse-shoers. Not one blacksmith in fifty knows how to shoe a horse properly. How frequently do boys and apprentices, as soon as they can drive a nail, undertake to set shoes without any knowledge of the anatomy of the horse's feet, or any of that inborn philosophy which teaches a man to look at the reason of the thing. It is a shame and an outrage upon the rights of horses to have such a state of things.

It is also a lamentable fact, that not one man in a hundred knows when his horse is well shod. Commonly, a man leads his horse to the blacksmith shop, lets the work be done, and then goes off with his horse, *satisfied*, because he has shoes on his feet.

There are two very common faults in shoeing horses. One is, *the shoes are too short*. How can a horse travel with ease, unless his shoes are long enough for him to set his whole feet down on the shoes? A horse suffers as much with short shoes as a man does with boots of any insufficient length. How can a horse travel easily all day over our rough roads, with shoes half an inch too short? I do not know how many times I have been pained at seeing horses with short shoes on. Have the shoe as long as the foot. The longer it is, reasonably, the better support it will give.

The second fault is, shoes are made *concave* instead of *convex*. When a horse sets down his foot, if it can, it will spread a little. This arrangement was made to save the animal from pounding a solid foot on the ground. The foot of a horse has layers or springs, as it were, in it; and the shoe should be made accordingly. If the heel of the shoe dishes in, how can the horse's heel spread when he puts his foot down? It can not; but it is bound tighter, so that it cramps the foot, and after a while it *results in pinched feet*.

A forward foot shoe should be made with the heel of it slightly convex to let the heel spread naturally when the horse puts his foot down. [Maine Farmer.

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HORTICULTURE.

We think the year of 1856, as a whole, bids fair to be memorable among fruit growers and gardeners, as the most unfavorable in its character and effects upon those important occupations, of any that has ever been experienced by the inhabitants of the new States of the West.

What of the fruit trees and shrubbery the winter did not kill outright, or of the vegetables and bulbs it did not freeze and destroy, the long protracted, inveterate and scorching drouth of summer seems determined to complete and finish.

Those who planted orchards last spring, and the year before, and the number must have been many, we fear have met with that success, that will not especially prompt their courage to renewed effort. But all such must bear in mind that such an extraordinary year will not probably again occur right off, perhaps not till newly planted orchards will grow to maturity, and may be die of age. "Try again!" is the motto; and keep trying. When a tree dies out, fill its place with a new, and better, and hardier one, if you can. This policy persevered in, will soon get you an orchard, and a good one too.

Plant as many western grown apple trees of approved kinds as you please, and as many standard hardy pears as you need, (with a few additional to die,) and as few French imported fancy dwarfs, and rapid growing sweet cherries, as you are willing to see die out, root and branch.

Don't be fooled by humbug tree peddlers, from eastern nurseries of high-sounding names; but abounding in small, crooked, stunted, moss covered, rootless trees, unless you have a fancy for the thing, and are willing to stand the loss of your money and time of growing an orchard. All who wish, can find good trees here in our own State nurseries; numbers of the best of which, we shall always be advertising.

Perhaps our eastern friends will think us unnecessarily severe on their trees imported West; and on that head we would say, "a burnt child dreads the fire." We have obtained towards 2,000 trees from the Rochester nurseries, in the last two years, for our own planting; and our instruction has invariably been for them to send their best, (and if they did, we pity those who had the worst,) and we have planted and taken as good care of them as we knew how. Nevertheless, we have not over one third of them now alive. But they have verified the old saying, that there is no great loss without some small gain; for the dead ones have furnished us with plenty of bean and pea poles, which is quite a convenience on the prairie. We have often felt particularly rich, (over the left,) when picking peas off from Imported French Poles, on quince stock, at four and six shillings apiece.

One main cause of our losing many of our trees, we ascribed to the extraordinary wisdom and goodness of dealers, in sending us varieties we did not order—a practice, by the way, that we should not good-naturedly stand again.

This cheat reminds us of a circumstance akin that occurred to an acquaintance of ours, last spring. He sent $25 to a certain Discorea Batatas Prince of humbugs, for $5 worth of Batatas, and the balance in something else; but received the full $25 worth of Battatases, (worth about their weight in ground nuts,) with the explanation that he had not the other articles, but took it for granted that he would want the full amount in Battatases. Was not that coolish?

Vitality of Seeds.—Parsnip, rhubarb and other thin scaly seeds keep for one year.

Carrot, cress, ochra, gumbo, onions, peas, peppers, and small herbs in general, for two years.

Asparagus. egg-plant, endive, lettuce, mustard, parsley, for three years.

Cabbage, cauliflower, corn, radish, seakale, turnips, for four years.

Beet, celery, cucumber, melon, squash, for from five to ten years.

To preserve seeds they must be kept cool without being kept damp.

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THE LAWTON BLACKBERRY.

The Seacor (or Lawton) Mammoth Blackberry, of which the above cut is a representation, is being extensively and successfully cultivated throughout the Eastern States, and is spoken of in high terms by those who are acquainted with it. It is a native of New Jersey, and has proved to be both hardy and productive throughout New England. We see no reason why they should not do well in Wisconsin, and mean for one to give them a trial; and shall do so with the fullest confidence of success.

We have no prejudice against color, and shall enjoy a dish of big fine blackberries (when we get them,) just as highly as an equal quantity of strawberries. We extract the following description, and remaks on cultivation, from Pardee's new work on Strawberry Culture, just published by C. M. Saxton & Co., 14 Fulton St., New York.:

"The characteristics of it are a hardy, vigorous growth, the canes are often an inch in diameter, and eight to twelve feet long, covered with laterals well loaded with fruit; so that a single stalk will produce from four to six and even eight quarts, and the canes are uniformly full of large perfect fruit in different exposures and locations.

The fruit is of regular, large size, oval shape, handsome, and superior flavor, so that our best pomologists, after a trial of several years, do not hesitate to pronounce it "the greatest acquisition." It is quite certain it has not deteriorated in the last eight or ten years, and it proves to be entirely hardy.

CULTIVATION.

"The blackberry rejoices in a moist, loamy soil, but will grow well in higher exposures, and is rather benefitted by a little shade and a cool northern aspect. When thus favored, it will prolong its period of bearing from four to six weeks. Usual good garden soil is favorable for the blackberry, and it will bear being made pretty rich with manures after the first year, and especially with muck or woods'-mould. It should be transplanted as early in the spring as possible, or in the fall, and especial care should be taken of its fibrous roots and its whole general culture the first year, and then it will grow, pro-

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duce fruit, and propagate itself rapidly.

The canes which come up one season will bear fruit the next and then die in the autumn, and the dead branches must be carefully removed early every spring, in order to make room for the new ones to take their place, and this beautiful process of reproduction thus goes on; so that a single plant set out in a good free soil will send up two, three, or four plants, and those will increase to a score or more the following season, if carefully pruned and kept clean.

The ends of the canes should be shortened about one quarter, early in the spring, when the old decayed ones are removed, and if the laterals are too long clip them also. They usually require no support.

TRANSPLANTING.

"Particular care, we think, is needed in transplanting the blackberry. It should not be attempted late in the spring, otherwise a great share of the plants will hardly survive the process. Mulching and watering are often useful and even necessary when transplanting.

It is well to set the plants four or five feet apart, in rows that are eight or ten feet distant, and they will soon cover the ground, and thus 500 plants will set an acre. Some large growers in the vicinity of New York have readily contracted their entire crop for the season at 25 cents to 37½ cents per quart. We have given a large space to this variety, not only because it is new, but because we believe it to be worthy of extensive cultivation by the public, both as amateurs and for the market." See advertisement, p. 432.

ORIGIN OF THE CATAWBA GRAPE

On the authority of Mr. Mosher, President of the American Wine-Growers' Association of Cincinnati, who appears to have investigated the subject very thoroughly, the origin of the Catawba grape is now referred to Buncombe county, North Carolina. They were first found at Murraysville, near Flat Rock, (at present the residence of Mr. Blake, of New York, but at that time owned by Mr. Murray, the father of Wm. Murray, very well known to all who ever visited the Limestone Springs in Spartanburg District, and at present living near Catoosa Springs, Ga.) In 1802, Mr. Murray says, the grapes were growing in great abundance at his father's farm. For the latter history and propagation of this grape, we quote from the communication of Mr. Mosher to the Western Horticultural Review:

"In 1807, Gen. Davy, a Senator in Congress, then living at Rocky Mount, on the Catawba river, South Carolina, in the bounds of the Catawba nation of Indians, transplanted some of these grapes to his residence; and sometime between the years 1807 and 1816, he took some of them with him to Washington, gave them the name of the Catawba grape, and disseminated them among his friends in Maryland. From this source it is probable they fell into the possession of Mrs. Schell, from whom Major Adlum obtained them, and made wine of them in 1822. In 1822, he sent the vines, with some of the wine, to Mr. Longworth, of Cincinnati." [Western Agriculturist.

HOW TO PRODUCE LARGE FRUIT.

A correspondent of the Gardener's Gazette says that by a very simple and easy process, fruits of many kinds may be raised about one third larger than is usually the case, and of greatly improved quality. The secret consists in supporting the fruits so that they shall not be allowed to hang the whole weight upon the stalk, or twist about in the wind. The Gazette states that when the fruit is allowed to hang naturally upon the stalk, the increasing weight strains the stem or twig, and thus lessens the quantity of nutritious food flowing to the fruit. The fruit may be supported either by tying it to a branch with a piece of matting or by enclosing it in a small net. Flowers, such as dahlias or peonies, may also be rendered much larger by the adoption of this system.

MANAGEMENT OF ROSES.

Mr. Rivers, the celebrated Rose culturist, makes the following practical remarks on growing the rose. Those who admire the Queen of Flowers, should profit by his experience:—

"It is deplorable to observe how soon and how certainly roses (unless under very favorable circumstances) deteriorate, when left to themselves, or to the culture generally bestowed on them, and to mark how unlike the beauteous objects first planted, a few years of neglect makes them. Now, the remedy for this great evil being so simple, and within the reach of all, surely we may expect to see it generally adopted; and for the guidance of those about to adopt such treatment, I may repeat that no renewal of the soil or change of site is necessary, but that careful taking up, well manuring, and careful re-planting at this, the proper season, is all that is requisite. Plants neglected, and that have been stationary for a number of years, may experience some check on such transplanting; but when it becomes annual, the very reverse is the case, and increased luxuriance the invariable result. Where pegging down the shoots, so as to cover the entire bed or borders is practiced (and an admirable practice it is) this treatment will not apply; but two or three inches of good rotten manure, over the entire bed, in autumn, will answer the same purpose."

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THE FASTOLF RASPBERRY.

"This fine variety originated at Fastolf Castle, near Yarmouth, England, where it attained a high reputation, which it has nobly sustained in this country.

THE FASTOLF.

"It is not quite so hard for a market fruit as the Antwerp, but it is rather soft, and of rich high flavor, and the fruit is very large, of a bright purplish-red, and is a large bearer. It requires protection in winter.

"The question of winter protection is a difficult and important one. The ordinary custom is to leave them exposed in the garden to the severity of winter, and, as a consequence, the Fastolf, Franconia, and True Antwerps, are rendered almost worthless. Even in Kentucky, those choice varieties require winter protection. The easiest way is to bend the canes down and cover them slightly with earth. Some tie them up in a withe of straw, or evergreen boughs, but these are not always sufficient.

"We have sometimes taken up the plants in the fall, and buried them in sand, and on the earliest opening of spring set them out with care, and in this way have raised extraordinary crops; but we have not proved this last process so fully as to incur the responsibility of recommending it. It would require to be very carefully done, so as to preserve all the fibrous roots, together with the advantage of favorable soil, for it to succeed well. They will continue in bearing some five or six years, but will not be in perfection, ordinarily, until the third year after planting.

RED ANTWERP.

"This variety has long been the standard sort, both in this country and Europe, and is a very fine fruit. So many spurious sorts are now sold under this name, that it is difficult to obtain the genuine, in many places. The Common Red Antwerp is smaller and round; while the true is large, regularly long conical, dull red, with a rich sweet flavor.

"The canes are of good strength when well cultivated, and the fruit ripens early in July. It also requires winter protection.

"The raspberry is used in a variety of ways, viz: for the hand, the table. pies, tarts, jelly, jam, ices, syrups, brandy, wine, and vinegar.

"The profits of production are very large; often, in the vicinity of New York, selling for from $500 to $600 per acre. From Milton, Ulster County, N. Y., it is said $10,000 worth is sent every year to New York market. The usual price is about one shilling per pint.

New Test for the Strawberry.—At a late meeting of Strawberry tasters, amateurs, a decision as to the best variety not having been agreed upon, it was proposed to leave the question to the birds. A careful watch was set, and it was discovered that the rogues gave a preference to Burr's New Pine, and we are not sure but they have good reasons for their preference. [Horticulturist.

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STRAWBERRY CULTURE AGAIN.

In making up the last number, a section in relation to the proportion and mode of planting staminate and pistillate plants was omitted, and as it is very important we here insert it:

"A few staminates will fertilize many pistillates; and to prevent the intermixture of the two sorts by runners, they may be planted in alternate strips, as indicated in the following diagram, S representing staminate and P pistillate varieties.

P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P	PATH.	S	PATH.	P	P	P	P	PATH.	S	PATH.	P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P
P	P	P	P		S		P	P	P	P		S		P	P	P	P

Those who have planted beds will need to be very careful to keep the plants moist until they are rooted, and well started. We suggested in the last number, that a thin covering of old hay or straw, would be found to be a great help in this matter.

After once rooted, the principal requisite for success in the management of these beds, is clean cultivation, keeping the runners down by hoeing or treating them precisely the same as weeds.

FALLEN FRUIT.—Never permit green fruit to decay on the soil beneath the trees. In every apple, pear, plum, and cherry, which is prematurely cast, there exists a minute insect which eats its way out in time, and becomes a source of evil to the succeeding crop. Gather up and either feed them to your domestic animals, or dispose of them in some way which will secure you against the results which must necessarily ensue from neglect. Swine turned into orchards the last of June, and permitted to have access till the fruit is gathered, afford a good protection against insects, by destroying the wormy fruit that produces them.

DAHLIAS, as they advance in growth, should be tied to neat rods, for the branches are very brittle—sudden gusts of wind will break them, and their beauty is destroyed for the season. If they have a moderate pruning, the flowers will be more largely developed in size and color.

[Michigan Farmer.

For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—In the June number of the FARMER, on page 257, an article appears over the signature of D. Worthington, which should have set this question forever at rest, at least among scientific men. But I see in the July number that two small guns have opened their batteries, (pages 321, 322,) and as big guns will take no notice of them, they must be met by small ones. The first has mounted his upon an old stack bottom. This selection, in my opinion, is absolutely necessary to experiment upon, in order to sustain such an absurd idea as winter killed wheat producing chess. We might as well contend that the white oak grows from the dead roots of the pine, because both will grow on the same soil, and one follows the destruction of the other.

The communication of page 322 says that the author, at the writing of his article, is 41 years of age, "and therefore his experience should, in this number of years, go some way toward settling the question," and then says that in his mind "it is settled conclusively that *wheat winter-killed will turn to nothing but chess.*" I am at this writing 50 years of age, and if this has anything to do with settling the question, I have at least the advantage of age over your correspondent. I have also industriously experimented, in doors and out, and have had a whole community at it, who nearly all believed in the changing of wheat to chess, and so on down to timothy, herd-grass and blue-grass, and the result was that all those who experimented, and sought for the truth, renounced the absurd notion of transmutation, and went to work like men, cleaning their wheat and their fields from the foul intruder, and in the course of a few years they carried wheat to mill and market—instead of chess mixed with a little wheat.

The result of my own experience is, that *wheat winter-killed will turn to nothing else but its mother earth.* I have seen whole stools dead and dry, occupying their places where they had grown the preceding fall, and those that had a spear left alive, were weak and puny, and generally taken by rust in harvest time. If chess is the production of abused wheat, why not sow it and cultivate it well, and thereby reinstate it to its

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former purity. This would be the result; just as certain as wheat would produce chess, chess would produce wheat. But this is all false, and the notion of wheat turning to chess by being winter-killed, and then those dead chess roots (for they do die after the seed ripens, just as wheat and corn roots do,) producing herd-grass, is a foul slander upon creation and its great Author, who said that "every seed shall produce its kind."

Chess is of that class of vegetation that does not produce seeds in the same year in which it germinates, but stands over winter, then heads out, and ripens; and the roots die —just as do the roots of mullen, coltstail, oats, wheat, rye, and many other plants. Thence it is that we never see chess mature with spring wheat if the soil is well cultivated. It is a well settled point in my mind that any close observer, whose mind is not too much prejudiced, may soon set himself right on this subject, by planting a drill of wheat and one of chess beside it, and be sure that he does not mix his seeds; and then closely watch their appearance in the progress of their growth. The blade of the chess has a fine beard or down on the under side and edges, about the sixteenth of an inch long, whilst that of the wheat is smooth. The blades must be held towards the sun, in a clear day, to detect the difference by the unassisted eye.

There are many men who say they can change a plant of wheat to that of chess. If any one should wish to test this magic skill, let him first be sure that the magician does not operate on chess. I have often thought this error was persisted in for a kind of cloak or excuse for careless and shiftless farming; for I am very certain that those who believe that wheat grows chess always carry to mill, or market, or sow bushels of it, whilst those who do not believe it, only carry quarts. I do not expect to convince any of the old heads who persist in this error of transmutation; their doom is sealed. But for the benefit of the proud young lord of the soil, I have written. I have spent 21 years of my life in the flouring business.

Yours truly, J. Britts.

Primrose, July 4, 1856.

Experience is the fool's despised friend.

For the Farmer.

WHEAT AND CHESS.

Messrs. Editors—The discussion as to the origin of chess has fairly commenced in the Wisconsin Farmer. A vexed question, indeed, and I do not wonder that you manifested some "impatience in your remarks upon Mr. H.'s communication in the April No." I do not purpose at this time to enter into any discussion of the subject, because it is a very unfruitful source of speculation, and may be settled in a better, and much more satisfactory manner, than by continually writing communications that give the results of experiments which can have no place in scientific testimony. It is very easy to assert that the roots of winter-killed wheat produce chess, and "nothing but chess," but it will be found upon trial, to be much more difficult to prove it. For my part, I am perfectly satisfied that chess can never be produced from wheat, or any other grain, or plant. Now let those who believe otherwise, demonstrate it by scientific experiments, and have the benefit of the following:

"Wheat Turning to Chess.—Quite a number of the correspondents of the Michigan Farmer, have been considerably exercised upon this subject during the past year; and it would seem from an article in the last number, from Mr. Wm. Anderson of Ann Arbor, that the believers in transmutation have been unable to find any one among the disbelievers who would offer a reward of $25, to any one that can and will produce wheat from chess. Mr. A. asks:

" 'If the anti-chess gentleman know that wheat will not turn to chess, where is the risk of offering small premiums to test and settle this dispute? But they appear unwilling to prove their faith by their works.'

"We do not wish to interfere in this controversy; but this question having been thoroughly discussed in our paper, commencing more than twenty years since, and continued for years, we gave it a very careful examination, and came to the conclusion —as did a multitude of farmers who read that discussion, that wheat could not be made to turn to chess. In that discussion, one writer, a very worthy man, stated that he could produce chess from wheat without difficulty. In answer to this our worthy and venerable friend, David Thomas of Cayuga, immediately offered the writer alluded to a reward of $50, if he would do what he believed himself able to do so easily—produce chess from wheat. Col. Chapin of Ontario, also offered a reward of $50, to any

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one who would perform this prodigy. It is sufficient to say that these rewards were never claimed, although great efforts were made to produce the feat necessary to obtain them. Following these examples, and in answer to the call of Mr. Anderson, we offer a reward of $50, to Mr. A., or to any one else, who will produce to us ocular demonstration that he has grown chess from wheat. If the believers in transmutation will set themselves to work to *prove* it, by endeavoring to effect the transmutation, they will ere long change their views, or at least convince themselves that it cannot be proved."

[Country Gentleman, June 10 1856.

Here is a chance for the transmutation believers, and let *them* prove "their faith by their works." Yours, &c., M. T. B.

MARSHLAND, July 12, 1856.

In relation to the chess question, we would say, that it seems to us to have been pretty well theorized in the last few numbers of the Farmer; and all back up their theories with more or less *facts*, although, singular enough, those facts very materially contradict each other. On the whole, it does not strike us as a very profitable discussion, to be carried on without system, between isolated individuals, to any considerable extent. We are in receipt of new communications on the subject almost every day, and all of about the same stripe, eliciting no new facts.

Now we would suggest, as this has been so long a tedious and open question, that some agricultural society take the thing in hand, and institute a series of careful experiments, the results of which would be conclusive to all reasonable men on the subject.

It would not take many years to test the matter fairly, nor would it necessarily cost much money. Why would it not pay? and which among our enterprising agricultural societies will take the matter in charge? We will be happy to publish the results of such an investigation; but we shall hardly find room for a great many more individual communications on the subject at present.

EDS. FARMER.

LEMON BUTTER.—Twelve eggs, 6 lemons, 2 pounds white sugar, 2 oz. butter. Rub the butter and sugar to a cream, beat the whites and yolks separate, grate the rinds of the lemons; mix the yolks with the butter and sugar over a slow fire, then stir in the whites and it is ready for use. Set away until cold. It makes a very nice sauce.

JOTTINGS FROM SOUTHERN WISCONSIN.

We were aware that the counties of Racine, Kenosha and Walworth were among the richest of our favored Wisconsin, but were not prepared to find this section quite so Paradisiacal as we did on visiting it a short time since. The soil is unsurpassed in fertility—woodland is liberally distributed through the prairie, and the whole by living streams. This portion of the State has been settled by intelligent, enterprising, industrious farmers for nearly twenty years, and they have made of it one vast garden—excepting an occasional spot which has fallen into the possession of some slack farmer, or speculator.

Racine city, like the other Wisconsin lake shore towns, is high, healthy, with commanding beauty of surrounding scenery; and the inhabitants have added to the naturally attractive features of the locality, until it is justly entitled to its hard won name of "Belle of the Lakes."

In the office of H. S. DURAND we saw a carefully prepared statement of the amount of manufacturing done in this city during the last year. In the aggregate it amounted to upwards of one million dollars. This is pretty good for a town of ten thousand inhabitants; but the proprietors of the different establishments are adding largely to their business the present year. Among the most prominent in the list of products were those of A. P. DICKEY, manufacturer of steam engines and boilers, mill work and all kinds of machinery; and J. I. CASE, who makes the threshing machines and tread powers so much used by western farmers. The article of leather, and over-shoes, amounted to about eighty thousand dollars.

We found time to call on Dr. P. R. HOY, and wish we had spare time to tell our readers what the Doctor is doing for the advancement of science and the good of mankind in general. He has the most extensive collection of birds, insects and reptiles ever made in one locality. He has devoted much attention to the natural history of Wisconsin, and the State would do well to reward him for his labors, and give him liberal encouragement for the further prosecution of the good work. The readers of the Farmer may have occasion to know more of him hereafter.

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Kenosha, ten miles from Racine, is equally fortunate in its location, and the inhabitants have decorated their grounds with trees and shrubbery—which adds more than costly mansions to the beauty of a city—until it is a real "love of a place." The public schools, under the management of Mr. J. G. McKindrey, the present Principal, are well kept, and the city is about erecting capacious houses, which will enable him to make them second to no public schools in the State.

Within the last year the business portion of Kenosha has been improved very much, and several large blocks are now being erected. We visited Mr. Cahoon, the pie-plant man, the ever-green man, the Clinton Grape man, the seedling gooseberry man. Who, that has tasted good fruit grown in Wisconsin, does not know, at least by reputation, Mr. Cahoon? We should like to tell the sights we here saw, but have not the space. Could every reader of the Farmer visit his garden, it would do more to create a *taste* for horticultural matters than reading all the best books on the subject. A *taste!* for Mr. C. not only discusses the beauties of different varieties, but gives his visitors ample opportunity to test for themselves.

The Water Cure of Dr. H. T. Seeley is a favorite resort for invalids. The Doctor has made it so by his speedy cures, good accommodations and moderate charges.

By favor of Mr. Morgan of the Eagle Foundry, we had an opportunity to accompany him through the farming country west of Kenosha—and such a country! Pleasant Prairie, Liberty Prairie, and the country contiguous, combine beauty of scenery, fertility of soil and a high degree of cultivation rarely equalled; but we cannot dwell, as time is short and we must pass on.

To Geneva the cars on the Central Road are now running. The crystal lake at this place adds greatly to the otherwise favored locality. Being so convenient to Chicago, Geneva would doubtless be thronged with pleasure and health seekers if the hotel accommodations were a *little* better.

Elkhorn, the county seat, is the geographical center of Walworth county, and is fast becoming a railroad center, for the Racine and Mississippi, the Wisconsin Central and the Milwaukee and Beloit roads, when completed, are to pass through and intersect at this place.

Walworth has set a good example for other counties to follow, in establishing a county poor-house and farm, as also in securing for it a competent superintendent. The reason why most establishments of this kind fail to accomplish the sought-for object, is owing to the bad management of superintendents. Is it reasonable to suppose that a man who cannot manage successfully his own affairs will do better for the public?

Delevan, on the line of the Racine and Mississippi railroad, is soon to have a newspaper, and "knowing the past we judge of the future," one that the inhabitants may be proud of—for Messrs. Baker & Doty will make a first class family journal. The Deaf and Dumb Institute at this place was established and supported by the bounty of the State, and is free to all deaf mutes residing within the limits of the State between the ages of 10 and 30 years. The building occupies an elevated and healthy site, and is capable of accommodating about 40 pupils. There is an annual vacation from the last Wednesday of June to the first Wednesday of September, and it was during this time—the 8th of August—that we were there. Persons desiring to place a pupil in the school, should address the Principal, J. S. Officer, acquainting him with the name, age and residence of the mute.

The Racine and Mississippi railroad is being pushed forward with a great degree of energy. It is now completed to Allen's Grove, and the iron horse will soon quench his thirst from Rock River, at Beloit. Passing through so fine a portion of Wisconsin, this road must be a paying concern, not only to the stock-holders, but a great benefit to the inhabitants along the line.

STUMP MACHINES.

In answer to the inquiry of our friend J. G., of Rutland, in relation to stump machines, we would say, that we saw one of Willis' famous machines, when down East, not long ago, which is understood to surpass everything of the kind ever yet invented. It was not in action, but from appearances, we should think it all that it is represented. It is said to pull up the hugest stumps with perfect ease, and to be very simple and easy

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to work—only requiring a horse, or yoke of cattle, and two men, to manage it efficiently

These machines complete for working, cost from $75 to $200, depending on the size; and one is sufficient for a township.

We mean to have one on exhibition at our State Fair, and actually working, if there are any stumps in the diggings. In conclusion we quote the longuage of a correspondent of the Worcester Spy, who saw one in operation:

"Twelve stumps were ousted in forty-eight minutes, by the watch; some small, some large, and others, perfect monsters in size and ugliness. One in particular, when thrown up, reminded us of the side of a house, under whose shade a couple of families might be cooled, these sunny days. It presented a mass of roots fifteen feet in diameter, and stray roots shooting out many feet further. One horse of common size on the end of the lever, took the draft, with great ease, and whether it were one hundred or five hundred tons purchase, I am unable to determine. The power seemed prodigious, and even frightful. We wish Mr. Willis very much success. His 'stump oratory' is peculiar; we understand he never fails in what he attempts—the stumps 'are bound to come;' and if yesterday was a fair display of his 'walking into' stumps, we had rather enjoy it than a 'Jim Crow,' or even a circus. This improved Stump Puller we rank among the elements of civilization; it makes the rough places smooth; it has a moral power; it heaves us on towards the millenium."

MICHIGAN VS. PENNSYLVANIA.

R. F. Johnstone, Sir:—Seeing in the Farmer for the present month, a report of the shearing of Merino sheep, owned by John S. Goe, of Fayette county, Penn., I thought I would give you an account of mine, although on a limited scale.

One Spanish buck's fleece, 13 pounds, 8 ounces, washed.

No. 1	Spanish	Ewe	Fleece,	6	pounds	2	ounces,	washed,
" 2	"	"	"	6	"	8	"	"
" 3	"	"	"	7	"	1	"	"
" 4	"	"	"	7	"	9	"	"
" 5	"	"	"	8	"	2	"	"
" 6	"	"	"	7	"	7	"	"
" 7	"	"	"	6	"	8	"	"
" 8	"	"	"	6	"	14	"	"
" 9	"	"	"	5	"	11	"	"
" 10	"	"	"	6	"	4	"	"

Eight of the ewes raised lambs and one lost one. If any one has a flock of Spanish Merinos that will beat them, I would like to hear from them through the Farmer.

Yours, J. L. Wheelock.

Salem, Washtenaw Co., Mich.

We clip the above from the Michigan Farmer; and in reply to Mr. Wheelock's challenge, we would publish a statement of what ten of our own sheep sheared, the present season, although we had not hitherto deemed it sufficiently remarkable, to say anything in particular about it.

We would further say, that this same ten sheep were wintered promiscuously among a flock of almost a thousand; and on the whole, pretty poorly kept. We have many more among the flock that sheared almost as heavy fleeces; but we merely select ten to match friend Wheelock's. We doubt not but these same sheep would have sheared 20 per cent. heavier fleeces, if they had been especially well kept. The list is as follows:

2	two year old	Spanish	Merino	Ewes,	sheared	9	pounds
of washed wool each.				"	"	"	"
1	two year old	Spanish		"	"	"	8
1	" "	"	"	"	Wether	"	8
2	" "	"	"	"	Ewes	"	7
1	" "	"	"	"	Wether	"	7
1	yearling		"	"	Ewe	"	8½
1	" "	"	"	"	"	"	6½
1	¾ Spanish and ¼ French				"	"	10

All of which, except the last fleece, we sold for 40 cents per pound, and that for 38. Wisconsin will here rest her case, as against Michigan and Pennsylvania, until something new turns up. Eds.

FARMERS, CLEAN YOUR WHEAT!

As the new crop of our State will soon begin to come into market, we desire to remind farmers of the restrictions passed at the Milwaukee Corn Exchange, last spring, and which will be adhered to, in future transactions. They are as follows:

Resolved, That hereafter the members of the Corn Exchange will make that difference in the price of clean and unclean wheat which real equity and the demands of the eastern market, and the reputation of Wisconsin wheat requires.

Resolved, That we will, as buyers and sellers of wheat, insist that the benefits of clean wheat and the losses of unclean wheat, shall fall where they properly belong, upon the producer.

Resolved, That we pledge ourselves individually and collectively to faithfully labor for the reforms contemplated in these resolutions, by always encouraging honest dealers by high prices, and discouraging the reverse with the proper deductions.

Farmers as well as dealers, will find their account in cleaning their wheat before bringing it to market. [Mil. Sentinel.

We copy the above notice, and hope that its admonition will be heeded by all farmers, and also by all buyers throughout the State. A farmer who carries dirty wheat to mar-

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ket, disgraces himself; and a buyer who buys it, aids and abets in disgracing the State. We hope that farmers will have more pride hereafter, and feel that they are each directly interested, in building up a high character for Wisconsin. The effect of a high and well established character for honesty of deal, and superiority as farmers, will raise the value of real estate five times as much as can be realized by selling dirt, and chaff, for wheat.

But if the farmers fail to reform in this matter of carrying dirty wheat to market, we hope that buyers all through the State will adopt such regulations as will be efficient to rectify such an unbusiness like and bad practice. We invariably run our wheat through one of Ela's best premium fanning mills before taking it to market, and believe it more than pays.

For the Farmer.

THE COMING STATE FAIR.

Eds. Farmer, Gentlemen—I wish to suggest a few ideas to my fellow farmers and business men, in relation to the forth coming State Fair.

And firstly, gentlemen, I would ask if you have thought the matter over and concluded to attend? And have you talked with your less enterprising neighbor about it, and advised him to go? and further, have you determined to take something along for exhibition; or have you yet realized that Fairs are wholly made up of what individuals take to them for exhibition? Such, kind reader, is the fact, and appeals to you, perhaps, with as much propriety and force, as to any one else.

Then look up your choice animals, implements or productions, and put them in trim for the occasion; for the time is drawing near to hand. Don't be so proud as to hold back, because perchance you may fear you have not the very best thing in the world. If you can do well, never mind though others may beat you; a comparison will show you where you are, and put you in the way of progress.

But above all, don't go with your hands in your pockets, merely to look on and find fault with others. Somebody has said that "the gossip and critic, when tracked home, is usually the most inefficient and worthless man in the world." My own observation verifies the saying. A just discrimination is appropriate, and profitable; but a confirmed fault-finder is a nuisance everywhere—a mere sieve, that allows everything to escape it but the dirt. Go, then, with a disposition to be pleased with what is reasonable; even tho' you may have seen the like, slightly excelled in *York State* or the old country.

In conclusion, I would advise all who consistently can, to go any way; the people, sights and scenes that you will see, will inevitably be a rare treat. Then again, we must have a pride in our State Fairs, as they are visited by many of the most enterprising, from other States, and as States, now days, are judged somewhat by the show they make on such occasions; it is always highly important in this point of view, that such displays be well attended—not only by gentlemen but by ladies. Yes, I say ladies! not of the "paper shoe and wasp waist style" exactly, but of the sterling, the enterprising, the useful—those who labor, and those who think. Come out, one and all, to this great mass meeting of the friends of labor, toil and usefulness. Don't let there be a lack of 25,000 present, because you stay away.

A Farmer,

who likes to meet his brothers and sisters at the Fairs.

We approve of the foregoing advice and timely exhortation, believing, as we do, that Fairs are the great and true holidays of the American people; we think everybody who can, cheats him or herself, by not attending them. People must recollect that it is a faster age than of old, and those who do not keep posted, will soon find themselves astern—nothing surer. Eds.

To Fatten Fowls.—Fowls may be fattened in four or five days by the following process: Set some rice over the fire with skimmed milk, as much only as will serve one day. Let it boil till the rice is swelled out; add a teaspoonful of sugar. Feed the fowls four or five times a day in pans, and give them as much each time as will fill them. Great care must be taken that they have nothing sour given them, as that prevents their fattening. Give them clean water or milk from rice to drink. By this method the flesh will have a clear whiteness.

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EDUCATIONAL.

For the Farmer.

OUR COMMON SCHOOLS.

MESSRS. EDITORS—This subject may be considered foreign to the kind of matter which should fill the columns of an agricultural journal; nevertheless it is a topic that has a claim upon the individual interests of the farmer. Upon the common school together with the home circle, (which should be in unison with each other,) does the farmer—do the masses depend for their early education, both moral and intellectual; and as the common schools and home influence, so are the people educated—and upon the right education of the people depends our health and prosperity as a nation. I contend that there is but little hope for permanency in any of the anticipated reforms of the day, save in the great panacea for moral and intellectual error—the proper education of the young. The American youth must be educated—educated *morally* as well as *scientifically*—instructed in the knowledge of truth, or ours, as a nation, will be a hopeless condition. Bowie knives, rifles, nor gutta percha canes will not educate this people. Minds, active, energetic, persevering minds, all alive to the work in our homes and common schools, are the means by and through which we may hope for victory. This is our only hope; our common schools may truly be said to be the hope of our country, and in our country I yet hope for thorough and efficient public schools. How is a change to be effected? The condition of our schools must be revolutionized—there is one thing which will effect this work of making the common schools to meet the wants of the people. School officers nor school teachers can work this change. *The interest of parents* is demanded; undivided, divested of all speculative motives, having in it a feeling of deep moral responsibility, one that contains in itself the elements of union, capable of ridding the possessor of all prejudice or sectarianism.

"But," inquires an individual, "what more can we do? We have furnished the means to defray all expenses, built a convenient school-house, hired at least a supposed-to-be qualified teacher, and sent our children to school. What more should we do in this matter?" I answer, *so far* you have done well; but if this is all you have done, you have only begun this work—you have only furnished some means to aid you, in the cultivation of what? Not of plants; not of fruits or grains; but of immortal minds, which are ever to be affected by the instruction that you shall impart. Serious thought, that mind, eternal mind, is thus to be affected—that the impressions here made are to have their influence through ages! What have schools and home instruction to do in this case? I repeat, that I believe our happiness or misery depends upon these. If there is one point upon which all should be united, it is in this God-like mission of educating the people.

Parents, it is your duty to know that your children are being educated aright; that their minds are being led out in the right direction. There is one great secret in the progress of a school, even after a qualified teacher has been engaged, and this comprises an absolute duty of parents, which is the frequent visitation of their schools. The presence of parents in our schools, not only gives to the teacher and scholars a lively interest, but affords the opportunity of judging correctly of the merits or demerits of the school. Let all parents visit their schools often. Parents, see to it that your children are educated. You are responsible; and do away this brawling about your teachers and school without any just cause—before you have visited your teacher and school. But it is generally the case that the greatest fault finders are those who visit schools the least. Visit your schools, and after thorough investigation, if you find the instructor incompetent, give him a fair dismissal, without much talk or ceremony, and not take up with the old idea, "We had better keep him for the term is near its close;" but discharge him forthwith, for it is far better to have no school than an unsatisfactory one. Nothing is gained in a district by frequent conversation upon the faults of a teacher; but rather let your actions be in accordance with your duty. If you have a good teacher, give him your hearty support and encouragement, and a fair compensation. Respect him: make him glad with your presence in the school-room. Let every parent visit his school. I repeat it, it is your privilege, your duty:

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don't let the next month pass before you have visited your school. You may be busy, you may have work that is calling your attention, but not louder than do your schools this day, for your presence and interest. Although within this State are many good school-houses, good teachers, and profitable schools, yet there are very many districts in a miserable condition in respect to schools. There are many buildings called school-houses and used as such, that would disgrace a respectable farm yard, under the title of swinecote.

there is no better index to the character of a people than their school-houses. If the inhabitants are able, and can possibly build a convenient and comfortable school-house, and still continue to wear time out with a little, old, leaky, 16 by 20 hut, as a place for the culture of the ever living principle in man; then, I say, look out for superstition and ignorance. If it were my business to travel through a country, and study the character of its people in respect to their moral and intellectual progress, I should deem it the first thing necessary, to acquaint myself with the condition of its common schools; to view the conveniences for their support. Let each parent think of school-houses, of teachers, and more than all, think of that young child of tender years, whose mind may be moulded almost at will, who is looking to you for instruction; and as you prize the welfare of that innocent one, you will not hesitate to furnish all the necessaries for its education and happiness. As the first step, let every district that is not furnished with a good school-house, prepare to raise a tax sufficient, at the next annual school meeting, to build one. O. P. D.

PALMYRA, Wis. Aug., 1856.

CLANDESTINE COURTSHIPS.—On this subject a certain writer discourses in these strong terms. There may be exceptional cases—one in ten or a hundred—but in the main he is right: "Clandestine courtships are not only dishonorable, but a base fraud on the confidence of parents. They are in every way discreditable, because, howe.er pure or sincere, the concealment implies a doubt of the integrity of one of the parties. Either the man is ashamed of the woman, or the woman is ashamed of the man—or one or both wish to deceive a confiding parent or good natured guardian; but looked at in any way, or in any light, it is disreputable."

For the Farmer.

WOMAN'S RIGHTS.

The unniversal opinion seems to be that woman forms society, and holds the balance of power in all civilized countries, and that she alone is responsible for the good and ill. If we take up a paper or periodical, whatever its leading object, somewhere on its pages will be found something on "woman's influence," "woman's sphere," &c. In all she is called upon to act her part in the various characters of daughter, sister, wife, and mother, after the most improved and enlarged patterns of Christianity. The infidel asks of woman quite as much as the Christian writer—perhaps a little more. But each in turn, seem to forget that in all these various relations of life, God plainly intimated that man is to be the support, protector and counselor—not alone, is woman responsible in the sight of God for those home influences, that make the heart in after life cling to the memories of the paternal hearthstone, and for those principles and precepts that mold all the future.

Has not man a mission at his own fireside? While woman is exhorted constantly to wear a cheerful smile, and speak in gentle tones, acting out firmly those principles of truth which are always beautiful, has man no corresponding example to stand by its side?

Woman's sphere is wide enough, and I would not have it made larger till man in his lordly strenght offers a more sure arm of support. M.

MINNEAPOLIS, Aug., 1856.

"THERE ARE two things," says a recent writer who has evidently studied the sex, "that a woman, however thoroughly she may forgive them, never forgets—neglect and unkindness; and when once these have cast their shadows across the bright eager gladness with which she yields up her whole soul as a thank-offering to him she loves, man, with his stronger, sterner nature, can no more bring back the delicacy and freshness of that young affection, than he can restore to the peach the bloom which his careless fingers have defaced. The love may still exist in its full reality, but the bright halo of early romance which surrounded it has been dispelled, never more to return."

BELLES are poetically termed "Butterflies of the animal kingdom."

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MISCELLANEOUS.

For the Farmer.

CHEERFULNESS.

BY A. J. MACKAY.

A lively fancy dwelt a while
  Within a muddy brain,
And brought upon the cheek a smile
  That soon had fled again;
For gloom had gathered through long years
  Its stupor o'er the mind,
And toil and care had smothered there
  All sentiment refined.
The heart had known no throb of mirth,
Or cheerfulness, of deeper worth,
To glad the pilgrimage of earth;
The fancy bright was born of dearth,
It perished early at its birth,
  And gloom was darker left behind.

A sunbeam lighted up a rill
  That trickled from its source—
A limpid spring on woodland hill—
  It shimmered on its course,
Through shade and sunlight, vale and moor,
  Its silver current dancing,
With smiles more bright, threw back the light
  From crystal eddies glancing.
The flowing tide grew deep and wide,
Until its sheen the shade defied—
The meads and hills on either side
In verdure deck'd with stateller pride,
And flowers their fragrance ne'er denied,
  To cheer it while advancing.

And onward flowing to the sea—
  Still onward, onward flowing—
Its current spread o'er many a lea,
  Thus broader, deeper growing;
The wild swan sought its placid breast,
  And o'er its glassy surface strayed;
And fishes from their pearly nest
  Within its liquid crystal played.
And tall trees bathed their shadows near
Its shores, but left its center clear;
Its laughing waves more bright appear,
As sweeping on its strong career,
The ocean oped to urn it there,
  Where sunshine ever toys with shade.

A child within its cradle slept,
  Enshrined in half-unconscious down.
And hopeful watch a mother kept
  Till many a dreamy hour had flown.
The child awoke, its accents broke
  Like music on the mother's ear,
And after years of cheer bespoke
  The answer of her yearning prayer;
For in that youthful mind was wrought
The virtue earnest prayer had bought,
And every word, and deed, and thought
With Nature's purity was fraught—
The soul glad inspiration caught
  From heaven, and sped its journey there.

JUST TRIBUTE TO PRINTERS.

The chaplain of the New Hampshire Penitentiary, who has officiated in that capacity for a number of years, pays the following compliment to Journeyman Printers:

"I have the happiness to number among my personal friends, many printers, but, though it may seem to imply either a lack of ability on the part of the *minister*, or the want of the qualities that are necessary in order to apreciate good preaching on the *other part*, I will relate the fact that I have never succeeded well with that class. For the nine long years, and with all the inducements offered, not one of that trade has connected himself with my congregation—and I do not think a man could be found of all who ever tenanted our prison, who could set up a column of type. I leave the reader to make his own comments, only remarking that it cannot be accidental, nor the explanation that the employment keeps them ignorant of prevailing vices and immoralities, nor yet that young printers are removed from the large masses where corruptions engender and spread. In all these respects this class are much exposed. It is evident, we think, that the employment has an elevating tendency, and is favorable to intellectual and moral improvement."

True as Gospel can make it. The art of printing, in itself, is an honest calling; hence all printers are not only honest and intelligent but upright and generous. The best men of our nation are graduates of the press, and printers, as a class, make the best of citizens, and (the intelligent ladies say) the best of husbands.—[Ex.

A DEAR KISS.

A curious trial was recently held at Middlesex Sessions, in England. Thomas Saverland, the prosecutor, stated, that on the day after Christmas he was in the tap room where the defendant, Caroline Newton, and her sister, who had come from Birmingham, were present. The latter jokingly observed that she had promised her sweet-heart that no man should kiss her while absent. It being holiday time, Saverland considered this a challange, and caught hold of her and kissed her. The young woman took it as a joke, but her sister, the defendant, said she would like as little of that kind of fun as he pleased. Saverland told her, if she was angry he would kiss her also; he then tried to do it, and they fell to the ground. On rising, the woman struck him; he again tried to kiss her, and in the scuffle she bit off his nose, which she spit out of her mouth. The action was brought to recover damages, for the loss of the nose. The defendant said he had no business to kiss her; if she wanted kissing she had a husband to kiss her, a better looking man than ever the prosecutor was. The jury without hesitation acquitted her; and the chairman said, that if any man attempted to kiss a woman against her will, she had a right to bite off his nose if she had a fancy for so doing.

A TAX ON BEARDS.—A bill has been presented to the legislature of Tennessee, levying a tax of five dollars upon every gentleman who wears a moustache, and a fine of five dollars upon bachelors over thirty years of age, for the purpose of raising money to increase the school fund. This will prove to be rather a close shave. [Exchange.

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For the Farmer.

A DAY AT CAIRO, ILLINOIS.

Few of us, in Wisconsin, realize the fact that twenty-four hours suffices to pass over the Illinois Central Rail Road from the borders of this State to Cairo, at the southern extreme of Illinois, where the soil and climate are suited to the growth of a dense and rank vegetation, not to be found in our State. I passed one day there early in July, and was struck with the magnificence of the forest trees—sycamores and cotton-woods 18 or 20 feet in circumference being very common. Other trees have similar gigantic dimensions, their trunks often completely enveloped by the running vines—the scarlet trumpet flower, the ampelopris, the ivy, or the grape vine. A leaf of the gymnoclandus, or coffee tree, measured three feet nine inches in length; and one of the sycamore, sixteen inches in width. The cypress tree adorns the woods with its light and delicate foliage; the pecannut tree is quite common, as well as a number of other trees not found in Wisconsin; but I looked in vain for the one-seeded honey locust, said to grow here. On the bottom lands where the city is built, (protected from the high waters of the Ohio and Mississippi rivers by a levee,) no carpet of grass is spread; but rank and coarse weeds, already higher than one's head, exclude all other plants from the waste grounds. Indian corn, which, at Milwaukee two days before, was scarcely knee high, was here twice the hight of the fences, already tasseled out, and with ears nearly ready for the table.

Cairo is undoubtedly destined soon to become a very important center of trade and travel. The steamboats bring a daily throng of southern people seeking cooler climes on the Great Lakes at the north. The several railroads already in progress of construction will soon connect it with Texas, Louisiana, Alabama, Georgia and South Carolina, and will concentrate at Cairo a very large amount of business which will find its way over the Central Rail Road to the north. Already the people of Milwaukee are luxuriating on roast beef brought from the rich grassy plains of Texas—and this is only the beginning of a commercial and social intercourse that is destined to increase to a very considerable extent, as time rolls on.

The lands along the line of the Central Rail Road were granted to the company by Congress, and they are now offered for sale at moderate prices and on very favorable terms. Great inducements are held out to persons wishing to find a home in the West, and who do not wish to be deprived of all the advantages of modern improvements and of society. Fuel and lumber are supplied at the numerous stations at moderate prices—the fuel from coal mines directly on the line of the road; the lumber mostly from the pine forests of northern Wisconsin. The Osage Orange is found to answer well, and to be the best material for fencing the open prairies—and many farmers have already planted hedges, though but few of them are sufficiently advanced to be of much service. For further information in regard to these lands, application may be made to Mr. John Wilson, Land Commissioner, Ill. Central Rail Road, Chicago. I. A. L.

MORAL COURAGE.

Sidney Smith, in his work on moral philosophy, speaks in this wise, of what men lose for want of a little moral courage, or independence of mind:—"A great deal of talent is lost in the world for the want of a little courage. Every day sends to the grave a number of obscure men, who have only remained in obscurity because their timidity has prevented them from making the first effort; and who if they could be induced to begin, would in all probability, have gone great lengths in the career of fame. The fact is, that to do anything in this world worth doing, we must not stand back shivering, and thinking of the cold and the danger, but jump in and scramble through as well as we can. It will not do to be perpetually calculating tasks, and adjusting nice chances; it did very well before the flood, where a man could consult his friends upon an intended publication for a hundred and fifty years, and then live to see its success afterwards; but at present, a man waits and doubts and hesitates and consults his brother, and his uncle, and particular friends, till one fine day he finds that he is sixty years of age; that he has lost so much time in consulting his first cousin and particular friends, that he has no more time to follow their advice."

Those who, without knowing us, think evil of us, do us no harm; it is not us they attack, it is the phantom of their own imagination; they have first built a man of straw and then waged war on him.

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STATE FAIR.

The State Fair, to be held in Milwaukee on the 8th 9th and 10th of Oct., bids fair to very much exceed any similar display ever made in the State. The spacious and fine grounds at the Cold Spring Course, where it is to be held, afford the most ample facilities for such an occasion; not only for the display of animals and articles, but for comfortably accommodating any amount of company; for the sporting of any number of fine horses, carriages and ladies. Now all this is necessary for a good show. True, it is a little out from the heart of the city, but the nearest good accommodations that could be obtained, and not much more than half as far out as the Chicago fair grounds last year.

The show of fine and good horses, may be expected to exceed anything of the kind ever yet seen in the Badger State, and considering the spacious opportunity there will be of exercising them, they cannot well fail of being a decidedly attractive feature; worth more of itself alone, than the entire cost and trouble of attending the Fair.

The large number of choice specimens of neat stock, recently brought into the State, will, with what were previously owned among our enterprising stock-breeders, serve to make up a fine show in this department without doubt. Then the chinking of lesser animals—sheep, fat pigs, and Shanghais, will serve to fill up the animal picture complete.

The display of agricultural and labor-saving machines and implements, will constitute, to many, the most attractive feature of the exhibition; especially as it is expected to be very ample, and to include some leading machines never yet exhibited among us.

Among other things, a completely equipped self-regulating Wind-Mill, set up and in operation—pumping water, shelling and grinding corn, cutting straw and wood, picking up chips, washing dishes, &c., &c. Its inventor claims it as being the twin sister of the steam engine, especially when the wind blows, and that is certainly almost all the time in Wisconsin.

What prairie farmer would not go a hundred miles (by railroad) to see a live windmill in motion, capable of pumping an abundance of water from a 40 feet well, for the entire farm stock, besides an overplus to water the garden?

Then next in order is expected one of those famous giant stump-pullers, of which you will read in another place in this number; actually engaged in extracting stumps, as rapidly and easily as a dentist, and without hurting half as bad. Then the whole family of reapers and mowers, will pe fully represented, with their near kindred, the threshers and winnowers: and the whole bordered by ample picket guards of the plow fraternity, the great prototype of all.

That all of our best manufacturers and dealers are intending to be well represented, we are glad to hear; all possible pains will be taken to exhibit their fine specimens of workmanship to the best possible advantage, and to award to each its full meed of praise.

Then the Ladies' Department, what may we expect to see in that? Something worthy of it, no doubt; something inclining to the useful, as well as the fanciful and ornamental. Certainly the female portion of community ought to make some show, besides mere skirt diameter, on these great State occasions.

May the weather be auspicious, the company large, and the entertainment ample and profitable.

BE CAREFUL OF SMALL THINGS.

Irving, in his "Life of Washington," dwells on the particularity with which the great hero attended to the minutest affairs. The Father of his Country, as his correspondence and account books show, was "careful of small things," as well as great, not disdaining to scrutinize the most petty expenses of his household; and this even while acting as Chief Magistrate of the first Republic in the world. The example of Washington, in this respect, might teach an instructive lesson to those who scorn what they call "petty details." There are thousands of such individuals in every community. We all know more or less about them. Yet no man ever made a fortune, or rose to greatness in any department, without being "careful of small things." [Rural New Yorker.

A discovery has been lately made in the Mammoth Cave, Ky., of a new passage two miles in length. This makes the cave eleven miles in length.

A diamond has been found on the shore of Lake Superior.

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DANE COUNTY AGRICULTURAL SOCIETY.

TUESDAY, Aug. 12, 1856.

The Executive Committee met at ten o'clock. Hon. A. A. HUNTINGTON was chosen Chairman.

The premium list was adopted in part and referred back to the committee to complete and publish.

Resolved, That a committee of five be appointed to select a location and make the necessary arrangements for the Exhibition.

Messrs. White, Powers, Montrose, Burdick and Curtiss were appointed such committee. H. F, BOND, Sec'y.

It will be seen by the above proceedings and the accompanying Premium List of said Society that it will hold a Fair on the 2d and 3d days of October, at Madison, embracing a variety of attractions. We expect, if the weather is favorable, to see one of the finest things of the kind that has ever been got up in this State. Dane county must contain nearly 50,000 inhabitants, 10,000 of whom at least ought to be on hand on such an appropriate occasion. Full that number have attended circuses at the same place during this season, and what have they now to show for it, except the recollection of a good laugh?

Rouse up, ye enterprising men and women of Dane county! Plan and determine what you will exhibit, and be putting it in trim for the occasion. Let us see what can be done in our fine county, and whether we have any reason to remain behind our neighbors. The Premium List of about $500, together with a laudable ambition, we doubt not will prompt all to do their share.

In the same connection, we would appeal to the farmers and business men of other counties to attend their respective Fairs. It is one of the most pleasant and profitable ways in which you can spend a day, or even two of them. EDS.

WASHING CLOTHES—A HINT.—Mrs. L. W., of Erie, Pa., says:—"I send you the following for your housekeeper's department; I have tried it the last four of five years; 'Whoever will soak clothes from twenty to thirty-six hours before washing them, will find that they can do without patent washing fluids, &c., and save nearly all the wear of clothes by rubbing, too. The clothes may be boiled without rubbing—any more than to rinse the loosened dirt.'"

DANE CO. AGRICULTURAL SOCIETY,

REGULATIONS

AND

List of Premiums,

For the First Annual Fair, to be held in Madison, Thursday and Friday, October 2d and 3d, 1856.

OFFICERS:

Hon. P. W. MATTS, President.
Hon. T. T. WHITTLESEY, W. A. WHITE, N. P. SPAULDING, } V. Presidents
H. F. BOND, Secretary.
D. J. POWERS, Treasurer.

REGULATIONS.

The Exhibition will commence at 10 A. M., and all animals and articles must be on the ground before that time.

The Committees to award Premiums will be announced at 2 o'clock P. M. of the first day, and suitable books supplied them in which to enter the awards.

There will be a Plowing Match in the afternoon of the first day.

There will be an Address delivered at 10 o'clock A. M. of the second day; after which the Premiums will be awarded and paid in cash, except those of $1 and under, which will be paid in books or periodicals pertaining to agriculture and its kindred arts.

In the afternoon of the last day, there will be a general parade of Premium animals, and a Stock Sale to close the Exhibition.

The Executive Committee will award such Premiums to the best Plowmen as they may deem expedient.

Forage will be supplied on the ground without charge.

Members of the Society, and all who may become such at the time of the Fair by the payment of one dollar to the Secretary, will be furnished with a member's ticket, which will admit them and their families upon the grounds at all times during the continuance of the Fair.

Single tickets, ten cents each, admitting one person, will be in readiness at the Treasurer's office on the Show Grounds.

Exhibitors will have a ticket to admit their hired man, but not transferable. Private carriages, 50 cents—each passenger therein, 10 cents.

Entries may be made by communicating with the Secretary, by mail or otherwise, designating the articles or animals, and the name of the exhibitor.

All animals and articles must be entered in the name of the owner.

The Judges *shall in all cases* withhold Premiums where the animals or articles are not worthy, even though there be no competition.

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Articles and animals removed from the ground before the close of the Exhibition, (except by permission of the President,) cannot recive a Premium even tho' awarded.

LIST OF PREMIUMS.

DURHAMS.

Best Bull over 2 years old, ... $5
" " under 2 " " 3
" Cow over 3 " " 4
" Heifer under 3 yrs. " 2

DEVONS.

Best Bull over two years old, ... $5
" " under " " " 3
" Cow over 3 " " 4
" " under " " " 3

GRADES AND NATIVES.

Best Bull over 2 years old, ... $4
" " under 2 " " 2
" Cow over 3 " " 3
" " under " " 2

WORKING OXEN.

Best Yoke of oxen, ... $3
Second best yoke, ... 2
Best yoke of steers, ... 2
Second best yoke, ... 1

HORSES.

Best Stallion that has stood in the County for mares the present season, ... $10
Second best do 5
Third best do ..... Diploma.
Best pair of Horses for all Work. $7
" " Carriage horses, ... 5
" Brood Mare with foal at foot, ... 5
Second best do do do 2
Best 3 years old Colt, ... 3
Best 2 years old Colt, ... 2
Best yearling colt, ... 1

JACKS AND MULES.

Best Jack, ... $5
" Pair of Mules, ... 3

SHEEP—SPANISH MERINO AND THEIR GRADES.

Best Buck, ... $5
2d do 3
Best Ewe, ... 3
2d do 2
Best pen of Lambs, 3 or over, ... 2
2d do do do under, ... 1

SHEEP—FRENCH MERINO AND THEIR GRADES.

Best Buck, ... $5
2d do 3
Best Ewe, ... 3
2d do 2
Best pen of Lambs, 3 or over, ... 2
2d do do do 1

OTHER VARIETIES OF SHEEP.

Best Buck, ... $4
2d do 2
Best Ewe, ... 3
2d do 1
Best pen of 3 Lambs, ... 2
2d do do do 1

SWINE.

Best Boar over 1 year old, ... $4
2d do do do 2
Best do Pig, ... 2
2d do do 1
Best Sow with litter of pigs, ... 3
2d do do do 2
Best Sow Pig, ... 1
Best pen of 5 Store Hogs, ... 2

POULTRY.

Best lot of Fowls of Foreign Breed, ... $2
2d do do do 1
Best do Native, ... 1

FARM AND GARDEN PRODUCTS.

Best sample of Winter Wheat, 1 bushel, ... $2
2d do do do 1
Best do Spring do do 2
2d do do do 1
Best do Oats, 1 bushel, ... 2
2d do do do 1
Best do Broom Corn, ... 1
Best do Potatoes, unmixed, ... 2
2d do do do 1
Best do Seed Corn on the ear, ... 1
do twelve Carrots, ... 1
do do Beets, ... 1
do six Cabbages, ... 50cts.
do peck of Onions, ... 50cts.
do six Squashes, ... 50cts.
do bushel of Flat Turnips, ... 50cts.
do do Rutabaga, ... 50cts.

MISCELLANEOUS.

Best exhibition of Daguerreotypes, ... $2
do do Ambrotypes. 2
do do Photographs. 2
do Cooking Stove, ... 3
Second best do 1

FRUIT—APPLES.

Best and largest variety of Apples, ... $2
2d do do 2
3d do do 1

PEARS.

Best and largest variety of Pears, ... $2
2d do do 1

PLUMS.

Best and largest variety of Plums, ... $2
2d do do 1

MELONS.

Best show of Melons, ... $1
2d do do ..... Diploma.

FARM IMPLEMENTS.

Best Farm Wagon, ... $2
do Fanning mill, ... 2
do Horse rake, ... 1
do Ox yoke, ... 1
do Farm roller, ... 2
do Wagon harness, ... 1
do Churn, ... 1
do Breaking plow, ... 2
do Stubble do 2
do Common cross plow, ... 2
do Grain cradle, ... 1
do Doz. wire Brooms manufactured in the county, 1
do Sheep rack, ... 2
Best and fullest lot of Farming Tools, ... 5

FARM MACHINERY.

Best Horse Power, Sweep, &c., ... $2
do do do Tread, ... 2
do Thresher and Separator, ... 2
dd Seed Planter, ... 1
do Grain Drill, ... 2
do Corn Sheller, ... 1
do Reaper, ... 3
do Mower, ... 2

DAIRY AND HOUSEHOLD PRODUCTS.

BUTTER.

Best lot of Butter, not less than 20 pounds, ... $2
2d do do 1

CHEESE.

Best three Cheeses, ... $2
2d do do 1

BREAD.

Best specimen of Bread made of winter wheat, ... $1
do do do do spring wheat, ... 1
do do Corn Bread, ... 1

ARTICLES MANUFACTURED IN THE COUNTY.

Best sample of Flour, ... $2
2d do do 2
Best sample of Corn Meal for family use, ... 2
2d do do 1

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Best sample of Buck Wheat Flour,	1
do Lot of Sashes Doors and Blinds,	3
2d do do	2
Best piece Woolen Cloth,	2
do Shawl,	1
do Piece Flannel,	1
do do Cut Stone,	2
2d do do	1
Best sample of Clothing,	2
do do Boots and Shoes,	2
do Two Horse Carriage,	4
do Single Buggy,	2
do Sleigh,	2
do Double Carriage Harness,	2
2d do do	1
Best Single do do	1
2d do do do	Diploma.
Best lot of Guns,	2
do Specimens of Graining and Painting,	1

LADIES' DEPARTMENT.

Best specimen of Home Made Carpeting,	$1
do do do Stockings,	1
do do Millinery of Home manufacture,	1
do do Dress Making,	1
do do Embroidery,	1
do do Gentleman's Shirt,	1
do do Household Linen,	1

Articles not enumerated in the above lists may receive premiums, at the discretion of the Executive Committee.

FISTULA—POLL EVIL.

We publish the following article for the benefit of a subscriber, (E. A. G.,) who queries as to the cure of this malignant disease, in our August number:

Fistula and poll evil are both usually caused by a bruise, the former frequently by the improper tightness of the top of the hame, or collar; the latter by receiving a blow on the top of the head or neck. The result is, that pipes are formed which discharge a glutinous matter very offensive, and keep the animal in a low and almost worthless condition.

The cure which I have practiced in my own and several other cases, and which, if thoroughly done, I will warrant not to fail, is as follows:

Cleanse the sore with soapsuds thoroughly, take a goose quill or smoothly-peeled apple-tree sprout and sound the pipe or pipes, finding their direction and depth; take some stiff paper, roll it up in horn shape about the size of a goose quill; fill with arsenic, double over the ends, insert the pipe and push or drive it to the bottom: serve all the pipes in the same manner, and you will see no further issue of matter until the diseased portion breaks loose and comes out. Now adjust your harness so as not to rub the part affected, and set your beast at work if you wish, but do not over-heat him, and no harm will result. After it breaks loose which will be in from three to six weeks, cleanse it one day with soapsuds, and the next with a wash composed of a teaspoonful of white vitriol, one do. burnt copperas, one do. burnt alum, and one of gunpowder, in one pint of rain water. Oil the sore well after washing. This will prevent the formation of any new pipes, and cause the sore to heal rapidly.

CALUMET CO. AGRICULTURAL SOCIETY.

A County Agricultural Society was organized in Calumet county, on the 8th day of July last. Delegates from most of the towns in the county were present. A Constitution was adopted, and the following persons were elected officers:

George A. Jenkins, President.
William Fowler, James Christy, H. C. Hobart, } Vice Presidents.
J. B. Denel, Recording Secretary.
T. J. Potter, Corresponding Secretary.
Calvin Merill, Treasurer.
Wm. F. Watrous, F. J. Curtiss, O. D. Fowler, Clans Oesau, Lemuel Goodell, } Executive Committe.

BLOOD STOCK.

It seems impossible to make some people understand what is meant by the expression, "Blood Stock." They will twist, and turn, and laugh at the idea that any farmer, by judicious selections, has reared a herd of cattle that inherits the principal traits of the animals selected to begin with.

They laugh at the idea of keeping the very best for breeders—and will tell you how a chance animal of their own has excelled the herds denominated "blood stock."

And yet when you ask what reliance they can have on the progeny of chance animals, they will tell you that they have bred from the same for sixty years in succession, and therefore they are confident of success in rearing their calves.

Now this is precisely the doctrine of the advocates of "blood stock." They breed from the best, and cast off the inferior animals. They want no crosses with the inferior animals, and are confident that by pursuing this course, they are on the right road to perfection, however long that road may prove.

Still there is another class of farmers, who profess to think that the most promiscuous intercourse between the males and females of cattle, will tend to produce better dairy cows and better working oxen, than can be produced by any kind of selection.

These farmers inquire what is meant by "blood stock." They would prefer to buy from the most promiscuous herds of cattle, because they occasionally find an extraordinary cow that yields more than the average of blood stock. If one in fifty is found o excel the average of select stock, they seem to think they have proved their case, and are ready for judgment.

[Mass. Plowman.

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DOMESTIC ECONOMY.

For the Farmer.

DOMESTIC RECIPES.

PRAIRIE HOME, July 11, 1856.

MESSRS. EDITORS—I send herewith directions for making a very pleasant and cooling drink, which may prove acceptable to some who have not an abundant supply of genuine "Adam's Ale." I send also directions for making two puddings, to grace the harvest tables which will soon decorate farmers' halls. In haste, E. M. D.

CREAM NECTAR.

1 oz. tartaric acid, 1 lb. white sugar, 1-2 pint water. Let them get blood warm. Beat the white of one egg and one teaspoonful of flour together; stir these into the other mixture, and let it come to a boil. To a tumbler two thirds full of water, put one and a half teaspoonfuls of the nectar, and a little soda. Stir, and drink.

SUET PUDDING.

Three and a half cups of flour, one cup of molasses, one cup of beef suet, chopped fine, a little salt, one cup of milk and a half teaspoonful of soda. Stir well togerher, and boil four and a half or five hours, in a tin pudding pan.

BAKED CORN MEAL PUDDING.

10 teaspoonfuls of corn meal, one quart of boiling milk, one cup of molasses, a little salt and butter. Stir all well together, and just as it goes into the hot oven, put in a cupful of cold water or milk. Bake three-fourths of an hour.

These are both good puddings, no mistake. If larger puddings are wanted, double the quantity of the ingredients.

NOTHING CAKE—One egg, a piece of butter same size, one cup sugar, one do. milk, one pint flour, one teaspoonful soda, two do. cream of tartar. Divide the milk, and dissolve the cream of tartar and soda separately, then pour them together.

GOOD CRACKERS.—I have used the following recipe for making crackers for forty years, and consider it superior:—One pint of warm water set as a sponge over night, half pound of butter, and the same amount of good lard, rubbed into the flour; knead hard, roll thin and cut with common tin cutter. They should be baked as soon as made.

PRESERVATION OF MILK.

Four different processes for the preservation of milk have been described in the London Chemist. They are as follows:

1st. THE PROCESS OF M. MABBRU.—This process preserves the milk without addition of any substance whatever. It consists essentially in the exposure of metallic bottles, each containing about a quart of milk, to steam raised to the temperature of 212° F. These bottles were filled with leaden tubes, by means of which they were vertically suspended in the steam from a chest filled with milk, so that there was constantly a layer of milk above the extremities of the leaden tubes. After having received sufficient heat, the bottles and their contents were suffered to cool, and when cooled, the leaden tubes were carefully closed under the surface of the milk to prevent the admission of air. A bottle of milk thus prepared, which had been kept fourteen months, was found unaltered when opened.

2d. PROCESS OF M. BEKAERT.—This method differs from that of M. Mabbru in the addition of a few drops of solution of carbonate of soda to the milk before it is subjected to the boiling temperature. In this process the milk may be kept in glass bottles, which must be carefully corked. After the weak alkaline solution has been added, the whole is heated in water gradually raised to the temperature of 212° F., and afterwards slowly cooled. A bottle of milk thus prepared was perfectly sweet and fresh after having been kept ten weeks.

3d. MOORE'S PROCESS.—Mr. Moore removes from the milk its constituent water, retaining its component elements. The condition in which butter, caseine, &c., are preserved is such that when the paste comes to be again united with water the milk re-assumes its original appearance and flavor.

4th. SOLIDIFIED MILK.—By the successive applications of carefully regulated heat, and by the addition of a substance which he has discovered, M. Fadelike has succeded in removing from the milk those of its constituents which, as he believes, cause it to decompose, and are also injurious to health. Sugar and a small quantity of gum tragacanth are then added to the residue, which is then ultimately solidified by the prolonged action of a constantly varied temperature. This preparation does not require to be excluded from the air.

CREAM TARTAR CAKE.—Half a cup of butter, two of sugar, three of flour, three eggs, two teaspoonfuls of cream tartar, one do. of soda dissolved in one teacup of milk, one tablespoonful of flavoring. Stir together quickly and bake in a quick oven.

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ORANGE PUDDING.—Grate the yellow part of the rind, and squeeze the Juice of two large oranges. Stir together to a cream, half a pound of butter, and half a pound of powdered white sugar, and add a wine glass of mixed wine and brandy. Beat very light, six eggs, and stir them gradually into the mixture. Put it into a buttered dish with a broad edge, around which lay a border of puff paste neatly notched. Bake it half an hour, and when cool grate white sugar over it.

You may add to the mixture a Naples biscuit, or two fingre biscuits, grated.

TO PRESERVE GOOSEBERRIES.—Take full grown gooseberries before they are ripe, pick them, and put them into wide mouthed bottles, cork them gently with new soft corks, and put them in an oven, from which the bread has been drawn, let them stand till they have shrunk nearly a quarter; then take them out and beat the corks in tight, cut them off level and rosin them down close. Keep them in a dry place.

MINCE PIES.—Meat, finely chopped, 5 lbs., good apples 7 lbs., sugar 3 lbs., raisins 2 lbs., currant jelly 1 lb., butter 4 oz., mace or cinnamon 1 oz. When this is prepared make a crust of two-thirds the usual quantity of lard, and one third of salt pork very finely chopped; also of which should be rubbed in the flour, and wet with cold water. Bake in a slow oven one hour.

THE LAST SHILLING.

BY CHARLES DIBDIN.

As pensive one night in my garret I sate,
My last shilling produced on the table;
That advent'rer, cried I, might a hist'ry relate,
If to think and to speak it were able.
Whether fancy or magic 'twas played me a freak,
The face seemed with life to be filling,
And cried, instantly speaking, or seeming to speak,
"Pay attention to me, thy last shilling:

"I was once the last coin of the law a sad limb,
Who in cheating was ne'er known to falter;
'Till at length, brought to justice, the law cheated him,
And he paid me to buy him a halter.
A Jack Tar, all his rhino but me at an end,
With a pleasure so hearty and willing,
Though hungry himself, to a poor distressed friend,
Wished it hundreds, and gave his last shilling.

" 'Twas the wife of his messmate, whose glistening eye
With pleasure ran o'er as she viewed me;
She changed me for bread as her child she heard cry,
And at parting with tears she bedewed me.
But I've other scenes known, riot leading the way,
Pale want their poor families chilling;
Where rakes in their revels the piper to pay,
Have spurned me, their best friend and last shilling.

"Tho' thyself hast been tho'tless, for profligate's bail,
But to-morrow all care shalt thou bury,
When my little history thou offerest for sale;
In the interim, spend me and be merry!"
Never, never, cried I, thou'rt my Mentor, my muse,
And, grateful, thy dictates fulfilling,
I'll hoard thee in my heart:—thus men counsel refuse,
'Till the lecture comes from the last shilling.

LAND OFFICES OF WISCONSIN AND MINNESOTA.

In compliance with the request of our friend A. H. KUMMEL, of Walworth Co. we publish the following list of the land offices, in Wisconsin, and Minnesota. Most of them are now temporarily closed to give certain Railroad Companies, time to select lands granted them by the general government. The Mineral Point, and Stevens Point offices, and may be some others are open.

As to who are good and safe land agents, we would say that we know of so many, that we would not find it convenient to particularize.

Land Offices and Officers in Wisconsin:

MINERAL POINT.
Register, Joel C. Squires. Receiver, Henry Plowman.
LA CROSSE.
Register, Cyrus K. Lord. Receiver, Theodore Redolf.
MENASHA.
Register, John A. Bryan. Receiver, B. H. Moores.
WILLOW RIVER.
Register, John O. Hening. Receiver, Otis Hoyt.
STEVEN'S POINT.
Register, Abraham Brawley. Receiver, A. G. Ellis.

Land Offices and Officers in Minnesota:

T. M. FULLERTON, Register, Stillwater.
WM. HOLCOMBE, Receiver, "
G. W. SWEET, Register, Sauk Rapids.
W. H. WOOD, Receiver, "
N. L. OLDS, Register Minneapolis.
R. P. RUSSELL, Receiver, "
W. W. PHELPS, Register, Red Wing.
C. GRAHAM, Receiver, "
D. UPMAN, Register, Winona,
L. D. SMITH, Receiver. "
MAJOR BENNETT, Register, Brownsville.
J. H. MCKINNEY, Receiver, "

COUNTY FAIRS.

After a careful watch of our large exchange list of the papers of the State, and an especial request in the last number of the FARMER that secretaries and officers of County Agricultural Societies would inform us when and where their Fairs would be held, that we might publish a list of them for the information of those wishing to attend, we have, up to the moment of going to press, succeeded in getting up only the following meager list. We feel rather small when we campare it with the lists of other Western States. Don't our people understand the importance of duly advertising such matters, especially when it can be done gratis?

Dane County,	at Madison,	Oct.	2 and 3.
Columbia "	Wyocena,	"	1 " 2.
Dodge, "	Horicon,	"	1 " 2.
Walworth "	Elkhorn,	Sept.	10 " 11.
Racine, "	Union Grove "		24 " 25.
Winnebago,	Oshkosh,	"	24, 25 " 26.
Waukesha "	Oconomowoc,	Sept.	17, 18.

DOOR KNOBS.—To secure the paint around them when cleaning, place a piece of pasteboard with a hole out to encircle them, and a slit to slip on.

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EDITOR'S TABLE.

To Our Patrons and Friends.—

We trust our readers will see some improvement in the mechanical appearance of the present number of the FARMER; resulting from the fact of our having got onto a new and fine working power press, every way just right for the purpose. Hereafter if we are behind the best of our neighbors in appearance, east or west, or promptitude, our friends will let us know. It is our intention hereafter, to mail regularly on the 20th of the preceeding month, as many of our subscribers live remote, and on slow weekly mail routes.

Those living nearer by if they get them too soon, can lay them aside for a week or so, until the first of the month arrives.

We have been making the most ample arrang ments, for the finest order of embellishment hereafter, and think we shall show a progress from number to number, that will redeem all the promises made by us, and more too. We are the more prompted to this course, from finding our efforts in the past so well appreciated. The large number of county Agricultural society that are adopting the FARMER as premiums, (all of whom have our thanks,) a gratifying evidence of the fact. We shall take especial pains to make it worthy of the favor thus shown it.

Back Numbers, and Binding.

We would say to those new subscribers who do not receive the January number, that we are temporarily out of them, but shall have plenty before the close of the year, and will forward them to all who have not received them. Further permit us to say, that all recent subscribers will find it their true policy to have the entire back numbers for the year, as the volume will contain the only continuous published proceedings of the State Agricultural Society; and further, we shall furnish a neat Pictorial Frontispiece, Title Page and Index, for binding—making this number of the FARMER the first in a series (to be continued, we doubt not, for a generation,) of volumes, containing the most valuable agricultural, scientific, and general useful knowledge, that can be gleaned and embodied from all and ample sources, from month to month, and from year to year. A few years hence, and who, among the intelligent, will not want such a work perfect from the beginning, for reference. We wish to be distinctly understood, as intending to so get up the FARMER as to make it a permanent Library Book, from year to year, as much as a mere periodical for monthly reading. We shall be binding 1,000 copies for ourselves at the close of the year, and in the same lot can bind for others in the neatest style, for about one half the price that individuals can get it done for themselves.

We shall always aim to have plenty of back numbers to fill up sets, for those who wish to have them bound; and hope that all will see their interest in doing so.

Twenty volumes of the WISCONSIN FARMER, uniformly bound, with neatly lettered backs, standing up side by side in 1876, will not look bad in any man's library, nor be worth less than cost. We recently bought a full set of The Cultivator, from 1835, and deemed it a valuable treasure from the father of Agricultural Periodical literature, and of a past age.

To Correspondents.—

Those furnishing articles for publication, in the FARMER, are requested to forward them as early as the 10th of the preceding month at the latest, and earlier if possible. It is a longer job to get out 7500 books of 48 pages all complete, bound, covered, trimmed, and mailed, than every person imagines. Hence all will see the importance of being on hand, if they would have us do likewise. Remember we propose to come out on the 20th of the preceeding month hereafter, invariably.

Calumet Co. Agricultural Society,—

CHILTON, Calumet Co., Wis.,
August 14, 1856.

EDS. FARMER, GENTLEMEN—We have organized a County Agriculnural Society in this county, and at the meeting they passed resolutions to have me act as agent to procure subscribers to the WISCONSIN FARMER. Please send me some specimen copies, and if you have any show cards or Prospectuses send some. Address F. J. Curtiss, Chilton, Calumet Co., Wis. Yours in haste,

F. J. CURTISS.

The Calumet County Agricultural Society have our hearty thanks, for the efficient and judicious manner they have taken to increase the circulation of the FARMER in their county. What could be sounder or wiser policy for an agricultural society, that means to do good and to attain to high success, than to labor first of all to circulate substantial and appropriate reading matter among the community, such as agricultural journals and books?

Yet strange to say, there are plenty of societies that don't dare to distribute them, even as premiums, through fear that somebody would rather have a dollar in a shape that they can eat, drink or spend it, than in a periodical or book, that will stand by and instruct and benefit them, and their families and friends, for years. A good farm journal is the seed of usefulness, from which thousands of lasting benefits will arise: while a *round dollar* is merely a ripened fruit, that

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is devoured in a moment and vanishes forever.

How many other societies in the State, will adopt the good example set by our friends of Calumet county, and appoint their most *active* and *thorough* man to canvass for the FARMER? We hope the number will be largely increased, *when the fact comes to be better understood and appreciated*, namely: That we are publishing the FARMER, more for the purpose of supplying a first class agricultural journal in a substantial form, for our farmers and business men, than with any view or expectation of making money out of it.

Our friend CURTISS has our thanks for the prompt and efficient manner in which he proposes to enter upon the task. May success attend us all in good works. EDS.

Our Mechanics and Manufacturers.—

We see by an article in the Whitewater Gazette, that our friends, Messrs. WINCHESTER & DEWOLF, have manufactured 3000 of their unsurpassed Premium Plows the past year, and some 200 tons of various castings. Such a business, so well done, and so rapidly built up, is a credit to them, and to the State. Their work is their highest praise.

Our neighbors, Messrs. BILLINGS & CARMAN, were making and selling ship loads of Plows, the present season, when an unlucky spark of fire reduced their whole establishment to a pile of ashes in a few moments; but Phœnix like, they have again arisen—greatly enlarged and improved, with a fine stone building, and capable of turning out any amount of Plows, &c., for the fall business. We think their burning will make their fortune in the end.

More recently, our friends, O. C. BUCK & Co, manufacturers and dealers in Furniture, have passed through the same fiery ordeal. A similarly unlucky spark, dropped perhaps by some stupid tobacco smoker, lighted the flames, and in about 30 minutes reduced about $15,000 worth of valuable furniture, stock, buildings, &c., to dust and blackened ruins. Thus pass away, in a moment, the results of the labor and toil of industry and economy for years. But such men will find friends, and are sure of success in the end. They are again open in good shape for business, with a splendid stock of Furniture.

We hope to see specimens of all our leading manufactures, at the State and County Fairs this Fall.

Reapers.—

While on this theme we would ask why Wisconsin does not make more of her own Reapers? Probably she has bought 2,000 the past year, at an expense of $300,000—one half of which, perhaps, were made in a neighboring inland city, (Rockford, Ill.,) no better situated in any respect for the business, than at least a dozen towns in our own State. This trade will constantly and rapidly increase; why should not our own enterprising mechanics, and capitalists, dip into it? It is a well established fact, that no legitimate business pays better.

To any competent parties who will start a good establishment at Madison, (and there is no better location in the West,) we are authorized by our best men, to offer an ample capital to back, and sustain them in the undertaking. Where are the men who know how, and would make a fortune?

It is much better for our farmers to have their Reapers made at home, where they can rely upon a warrant, and where they can be so much more easily repaired.

View of the Ohio State Fair for 1856.—

We are indepted to some Ohio friend, for a view of their forthcoming State Fair to be held at Cleveland from the 23 to the 26th of September. It was probably taken by some clairvoyant, who can see into the future. But be that as it may it is a splendid picture, and can hardly be surpassed except by the reality. We attended a fair on the same grounds four years ago, and have seldom been more highly interested. Ohio is now the Banner Agricultural State and will be, until some one further west, takes the wind out of her.

We mean to attend her fair this fall, and hope to meet as many Wisconsin friends there as possible. It will be a splendid show if nothing extraordinary prevents.

A New Field for Circulation.—

A few days since, we received a call from a gentleman from CARACCAS, South America; native born and bred and of Spanish origin and a downright gentleman, out and out. He called to subscribe for the FARMER, and what was better he subscribed and paid for two years; now is not that encouraging for South America; we think we shall soon advertise for a 1000 active young men to go there and canvass for us, in which case none need apply, that are adicted to fillibustering. Who among our Agricultural brethren, can boast of a larger circulation in South America?

Watermellons.—

We are indebted to our friend B. C. CHURCH, of Wyoming, for an extra feast of very extra watermellons, consisting of two varieties—the Ice Cream and the Mountain Sprout. They are both very large and of unsurpassed quality, especially the first.—Mr. C. is one of those men who does what he does well.

We are Indebted

To to the HON. CHAS. DURKEE for valuable Public Documents.

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Advertisements.—

We insert several new advertisements this month; to all of which we call especial attention. In relation to our advertisements generally, we wish to have it understood, that we do not at any time intend or wish to advertise anything unless we believe it to be first rate, and what we represent it, and withal something of general interest to our readers. *Bogus articles* and *patent humbugs*, will find no favor with us if we know it, however well they may pay; we want that distinctly understood.

Fine Carriages.—

BIRD BROTHERS, of this city, have just turned out a splendid family coach, for Ex-Governor FARWELL. It is one of the finest things of the kind that has ever been got up in the West, we will venture to say. It is in every way creditable to them, and none too good for its worthy owner. Price, $1,000. Bird Brothers are doing themselves and the State great credit, by their splendid and substantial specimens of carriages.

City Crockery Store.

No. 156 East Water Street, Milwaukee, Wisconsin.
M. G. ELMORE & CO.,

Importers and Wholesale and Retail Dealers in China, Glass and Earthen Ware, Lamps, Brittannia, and House Furnishing Wares, and Manufacturers of Looking Glasses.

THE Subscribers having recently established a house for the sale of the above Goods in this city, respectfully solicit a call from buyers. We have the Largest Store, the Largest Stock, the Finest Goods, and will sell Lower than Goods have heretofore been sold in this or the Chicago market.

CROCKERY.—Our assortment is unsurpassed—having recently received of our own Importation a large Stock, T. & R. Boote's manufacture and the newest patterns.

CHINA.—Rich, White, Gilt and Decorated, Tea and Dinner Sets—varying in price from $8 to $200.

GLASS.—A large variety, both Cut and Pressed, among which may be found the New Diamond Goods,

LAMPS.—Both Hanging and Stand—for Oil, Camphene and Fluid, new designs.

LOOKING-GLASSES.—From the cheapest to the Best French Plate.

GAS FIXTURES.—The largest assortment of Cornelius, celebrated manufacture. Some very rich patterns, as high as $150 a Chandelier.

TABLE CUTLERY.—Silver Plated, Brittania, Japanned and Planished Tin Wares. In fact, a complete assortment of all the Goods usually kept in a first class Crockery Store.

FANCY GOODS.—We have a Stock formerly comprising the "Temple of Fancy," which we offer At Cost, having bought them to get possession of the Store now occupied by us, and wanting the room now occupied by them for the Crockery Trade.

M. G. ELMORE & CO.

MILWAUKEE, Wis., Sept. 1, 1856. tf.

LANSING BONNEL,

89 & 91 East Water Street, Milwaukee, Wisconsin,
MANUFACTURER OF

THE Celebrated King of Stoves and Forest Oak, (two of the best Stoves ever made.) Also, every variety of Box and Parlor Stove. Tinners Stock, in any quantity. Agent for the sale of Herring's Safes, Fairbank's Scales, and Spratt's Self-Sealing Cans, for preserving in a fresh state Fruits and Vegetables.

☞ Circulars of all the above articles will be sent on application to me.

MILWAUKEE, Sept. 1, 1856. tf.

A. B. VAN COTT'S

JEWELRY STORE!!

NORTH-EAST CORNER OF
East Water and Wisconsin Streets, Milwaukee.

THIS old and well tried establishment is as new as ever, in its full tide of prosperity. The stock of Goods is new and choice, and the prices so favorable as to make the place a favorite and desirable resort for persons of all ages, sexes and conditions.

The Stock is the largest and most desirable ever brought to the western market. New Goods of our own importation and manufacture, which will be sold to the trade at the lowest New York Jobbing prices.

Jewelers, Merchants and Peddlers, will do well to call before going East or purchasing elsewhere. Among this Stock may be found a full assortment of WATCHES, from the most celebrated manufacturers, together with JEWELRY of every kind of the most fashionable patterns. Also—MASONIC JEWELS and REGALIAS of our own manufacture. Watch Glasses and Materials; also, Watch Maker's Tools, of every variety.

The proprietor is thankful for past favors, and requests a continuance of them

MILWAUKEE, Sept. 1, 1856. tf.

Notice To Stock Breeders.

FOR SALE—The very Superior Imported Durham Bull, "ROTHERSTHORPE," 3 years old, (998 A. H. B., vol. 2 p. 225,) bred by Geo. Falkner, Esq., Rothersthorpe, Northamptonshire, England. Also a pure bred DURHAM BULL CALF, sired by Imported "Rothersthorpe"—Dam, Imported "Diana," also bred by Mr. Falkner, (See A. H. B., vol. 2 p. 250,)

The above animals are of a rich red color, with a little white, and descended from some of the best herds in England.

☞ For Price, Pedigree, or to view the animals, apply to the subscriber, JOHN. P. ROE,

MUSKEGO, Waukesha Co., Wis., Sept. 1, 1856. tf.

Nursery Stock For Sale.

20,000 APPLE GRAFTS, one year, of fair size, embracing 25 of the best varieties—true to name. Price, $30 per thousand 10,000 Buckthorn Plants, for hedges, one year. Price, $5 per 1,000. 10,000 Acacia, (three thorned for hedges,) fine plants, very hardy, 2 years, price $5 per 1,000. Pie Plant, three best varieties, in quantity, from $5 to $25 per 100.

The above will be lifted about the 1st of Nov., or earlier if desired; delivered at the Railroad Depot, in Watertown or Whitewater, if in large quantity.

Orders should be sent in early.

Standard Trees of Apples, &c., in quantity; also Dwarfs and Garden Fruits of all kinds. Fine Evergreens, and large varieties of Ornamental Shrubs, Roses, &c., Root Grafts will be for sale during winter and spring—securely packed for transportation, any time.

Please call and examine, or address

J. C. PLUMB & CO.

LAKE MILLS NURSERY, Wis., Sept. 1, 1856. 3m.

FRUIT TREES.

A CHOICE Collection of Fruit Trees, Shrubs, Vines, Plants, Roses, Dahlias, Evergreens, &c., Cultivated and for Sale by A. G. HANFORD, at his Nursery, Waukesha Co., Wis.

Apple, Pear, Plum and Cherry Trees, Grape Vines, Currants, Gooseberries, Raspberries and Strawberries in variety. Pie Plant and Asparagus Roots. Houghton's Seedling Gooseberry—Antwerps and Franconia Raspberries, in quantity for market planting.

ROSES.—Hybrid China, Prairie, Moss, Hybrid Perpetual, &c. Many beautiful sorts—some of them superb.

☞ Careful selections of Fruits suitable for the Orchard and Garden, will be made by the proprietor when desired. A. G. HANFORD,

WAUKESHA, Wis., Sept. 1, 1856. 3m.

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Madison Agricultural WAREHOUSE.

OF

SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constansly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,

Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " rivited Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
apr-tf At sign of Pad Lock, Morris Street.

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND *MANUFACTORY,*

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6⅛6. 6. to 2.10⅛7ft., 1¼ & 1⅜⅜in. thick, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great ecomomy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.
MADISON, WIS., June, '56. tf.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "

Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c. The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.
MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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NOTICE.

THE SUBSCRIBER would inform Farmers and others concerned, that he proposes to dispose of about one half of his fine flock of Merino Sheep, during the present season. They are from three-fourths to full blood Merino; and numbers of the Ewes sheared fleeces of *Superfine Wool* which, when washed, weighed from 7 to 9¾ pounds; many of the last year's lambs, from 5 to 7 pounds; and the whole flock of nearly

Eight Hundred Sheep,

averaged 4¼ pounds of washed Wool per head. Considering the extraordinary hard winter, together with the fact that they were not very well taken care of, we think such a product of wool is an ample recommend for the Sheep, and it shows what they might do in smaller flocks, and properly cared for.

These Sheep, except the Bucks, were all raised in Wisconsin, and have always been perfectly healthy; and, being mostly Ewes, they are just the stock from which to start the right kind of flocks.

We will sell, or let them in parcels, to suit parties, and for prices, and on terms of payment as favorable as can be wished, provided always the security is satisfactory.

We have also a choice lot of Merino Bucks, which we would sell, or exchange for others equally good, as we wish to avoid breeding in and in. Also a few choice Buck Lambs, for sale cheap.

Any further information desired we will give by mail or otherwise, and the sheep may also be seen on the '76 farm, four miles north-east of Madison.

D. J. POWERS.

MADISON, Wis., Aug. 1856. tf

TO

AGRICULTURAL AND HORTICULTURAL

Societies.

WE WOULD particularly invite the attention of those Societies, who are about to make up their PREMIUM LISTS, to our large collection of Agricultural Books, which are peculiarly adapted for Premiums.

The awarding of Agricultural Books, in the place of small Money Premiums, has been extensively adopted, and has given the highest satisfaction.

ADVANTAGES OF THIS PLAN.

It promotes the dissemination of much needed information among Farmers.

It combines the advantages of a Diploma with a Premium of Intrinsic value.

It substitutes a permanent and Expressive Token of Honor for the pittance which is frequently humiliating to the recipient.

It avoids the fostering of a mercinary spirit among Competitors, and better comports with the dignity of an honorable emulation between Friends and Neighbors.

We will be happy to furnish to applicants a Catalogue of those of our Publications which we consider most appropriate for the use of Agricultural societies, for Premiums, on which a liberal discount will be given.

C. M. SAXTON & CO.,
Agricultural Book Publishers,
Aug. '56. 2m. 140 Fulton St., New York.

NEW MILLINERY STORE.

NO. 4, WASHINGTON AVENUE,

MADISON, WISCONSIN.

HAVING just returned from the East with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the LADIES to my newly selected stock of

Bonnets, Ribbons, Flowers,

and general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS,

SILKS AND CASHMERES,

together with an Elegant lot of Dress Goods. Also

YANKEE NOTIONS

in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis, June, '56. tf.

Annual Report

OF THE

MADISON MUTUAL

INSURANCE COMPANY,

FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date,	$1,374,284 00
Total amount of Premium Notes received,	21,500 00
do do Cash Premiums received,	11,454 00
do number of Policies issued,	2,121
Total amount of Premiums received to date,	$32,954 64
do do Losses and expenses paid to date,	9,871 40
Balance in favor of the Company Jan. 1, '56,	$23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to Farmers and others wishing Insurance, a safe and reliable Company in which to insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:

B. F. HOPKINS, *Sec'y.* N. W. DEAN. *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS. *V. Pres.*

Directors:

L. J. FARWELL,	N. W. DEAN,	SIMEON MILLS,
L. W. HOYT,	W. N. SEYMOUR,	H. A. TENNEY,
D. J. POWERS,	A. F. CADY,	D. ATWOOD,
F. G. TIBBITS,	B. F. HOPKINS,	WM. C. WELLS.

Jan. tf. C. C. OLIN, General Agent.

D. S. DURRIE,

Wholesale and Retail Dealer in

BOOKS & STATIONERY,

BLANK BOOKS, WALL PAPER, AND FANCY GOODS, BRUEN'S BLOCK, MADISON, WISCONSIN.

BOOK BINDERY

CONNECTED WITH THIS ESTABLISHMENT

BINDING

DONE AT THIS OFFICE.

MAGAZINES, MUSIC AND

Miscellaneous Books Bound on Reasonable Terms.

Blank Books Manufactured.

POWERS & SKINNER.

MADISON, Wis., Aug.. '56.

E. B. CRAWFORD,

FASHIONABLE MERCHANT TAILOR,

KING ST., (Near Madison House,) MADISON, WIS.

SUFFOLK PIGS,

OF PURE BLOOD---FOR SALE BY

A. G. HANFORD.

WAUKESHA, Wis., Sept. 1, 1856. tf.

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SCHOOL BOOKS FOR WISCONSIN!

RECOMMENDED JANUARY 19TH, 1856, BY

HON. A. C. BARRY, State Superintendent.

It is proper to state that the following Books were selected among others, by the Hon. A. C. Barry, to be the Text Books for the State of Wisconsin, as per his letter to the Publishers, under date of January 19, 1856, in which he states that he had recommended them:

GEOGRAPHIES.

MONTEITH'S FIRST LESSONS IN GEOGRAPHY, ... 15
MONTEITH'S YOUTH'S MANUAL OF GEOGRAPHY, ... 50
McNALLY'S COMPLETE SYSTEM OF GEOGRAPHY, ... 1,00

In cheapness, adaptation to the different grades of schools, improved methods, and execution, these Geographies according to the testimony of many of the best Teachers, are unsurpassed. (See testimonials.)

The new series of Geographies, by JAMES MONTEITH and FRANCIS McNALLY, is generally admitted by those who have examined or used it, to be better adapted to the present wants of the school-room than any other published. They are *practical*, complete, concise, well made and cheap. "Monteith's First Lessons in Geography" presents the outlines of the subject in a simple and attractive form, and does not fail to interest the beginner. "Monteith's Manual in Geography," is made for primary or intermediate classes. It gives the leading features of Geography combined with History and Astronomy, in a manner so well arranged and condensed as to make it possible for the beginner, who may have the advantages of school no more than three months in the year, to complete the subject in that time, and possess himself of a general knowledge of the entire matter. This is just the book for *Country Schools* that are taught only a part of the year.

McNALLY'S "School Geography" completes the Series. This is a quarto of 98 pages, and is designed for advanced classes. It is a new book, and not only contains many radical improvements in the *manner* of treating the subject, but all the latest statistical information, and the changes in political divisions. It would be impossible to give here all the improvements which recommend this book, but the main one, and that which will readily give it favor with all scientific instructors, is that it is the only book extant which embraces the science of Geography only. History and Astronomy are studied as distinct sciences. Why should not Geography be entitled to the same consideration? Our best teachers have long been annoyed with the lumber and foreign matter, introduced into the Geographies put into the hands of their pupils. The immense popularity of this work considering the short time since its publication, proves that it is eminently adapted to the present wants of our schools.

ARITHMETICS.

DAVIES' PRIMARY ARITHMETIC, (*Revised Edition,*) 15
DAVIES' INTELLECTUAL ARITHMETIC, (*Revised Edition,*) 25
DAVIES' NEW SCHOOL ARITHMETIC, (*Revised Edition,*) 40
DAVIES' UNIVERSITY ARITHMETIC, (*Revised Edition,*) 75

Davies' Arithmetics are in more general use than any others. Teachers are attached to them for the brevity and correctness of their definitions and their simplicity of style. They need no praise, having been so long known, and so universally used, that there are but few teachers who are not acquainted with them. The "Intellectual" possesses all the excellencies of Colburn's, without its defects of system. The revised edition of the "School Arithmetic" is meeting with unlimited success and favor East and West. The attention of Teachers is especially called to the merits of these books.

DAVIES' ELEMENTARY ALGEBRA, ... 75
DAVIES' ELEMENTARY GEOMETRY, ... 1,00
DAVIES' BOURDON'S ALGEBRA, ... 1,50
DAVIES' LEGENDRE'S GEOMETRY, ... 1,50
DAVIES' ELEMENTS OF SURVEYING, ... 1,50
DAVIES' CALCULUS, ... 1,50
DAVIES' DICTIONARY OF MATHEMATICS, ... 2,50

ENGLISH GRAMMAR, COMPOSITION, &C.

CLARK'S NEW ENGLISH GRAMMAR, ... 60
WELCH'S ANALYSIS OF THE ENGLISH SENTENCE, ... 75
BROOKFIELD'S FIRST BOOK IN COMPOSITION, ... 40
WRIGHT'S ANALYTICAL ORTHOGRAPHY, ... 25
PARKER'S WORD BUILDER, ... 25
NORTHEND'S DICTATION EXERCISES, ... 25

HISTORIES.

WILLARD'S SCHOOL HISTORY OF THE UNITED STATES, ... 75
WILLARD'S LARGER HISTORY OF THE UNITED STATES, ... 1,50
WILLARD'S UNIVERSAL HISTORY, ... 1,50
WILLARD'S HISTORIC GUIDE, ... 62½

Mrs. Willard's Histories are the Standard works throughout the United States.

Natural Philosophy.

PARKER'S JUVENILE PHILOSOPHY, Part First, ... 25
PARKER'S FIRST LESSONS IN NATURAL PHILOSOPHY, ... 85
PARKER'S SCHOOL PHILOSOPHY, ... 1,00

These books are rapidly superseding other works upon this subject.

FULTON & EASTMAN'S BOOK KEEPING, ... 75
BLANKS TO FULTON & EASTMAN'S BOOK KEEPING, six in a set, ... 75

Teachers and School Officers will receive by mail, any of these recommended books for examination on the receipt of *ONE HALF THE PRICES* given above—*Postage free.*

To those wishing to introduce these books into schools, we will furnish them at *LARGE DEDUCTIONS* from the above prices. Address the publishers—

A. S. BARNES & CO., New York, or
E. B. GRAY, Milwaukee, Pub. Agent.

IN PRESS—SCHOOL CHEMISTRY, by Professor John A. Porter. Will be published on the first of July.

MILWAUKEE, August, 1856. tf

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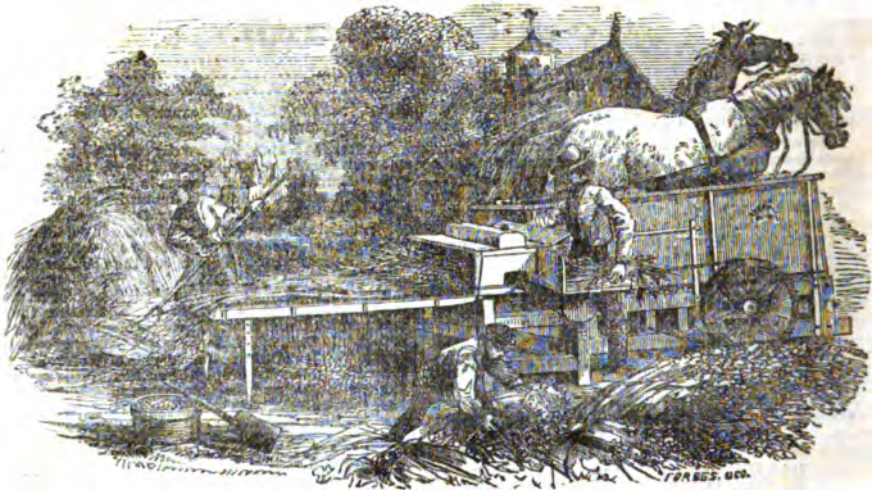
CHICAGO

AGRICULTURAL WAREHOUSE

AND

SEED STORE.



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FALL WHEAT OF SEVERAL VARIETIES AND TRUE DEMAND.

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No. 204 Lake Street, Chicago, Ill.

CHICAGO, ILL., August 1, 1858. tf.

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PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

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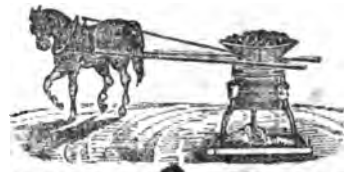

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THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 23d of February last. A Committee composed of Gov. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill, It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

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W. A. GRAY.

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PLOW FACTORY,

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PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

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Our plows are for sale by S. K. FOX, Madison, Wis., L. A. WINCHESTER, WM. DeWOLF.

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DODGE COUNTY NURSERY,

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☞ All Communications promptly Attended to. ☜

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Capital House Block, Madison, Wis.,
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PURE SILVER AND PLATED WARE,
FANCY GOODS, CLOCKS, &C.

All Goods warranted as represented or money refunded. Silver Work bought at our store is Engraved free of charge. Watches and Jewelry Repaired and warrented, by *Experienced Workmen.*
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1856] MILWAUKEE [1856

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ISAAC BONNELL—AGENT,
Wholesale and Retail Dealer in Stoves, Tin and Japanned Ware, and Agent for

HERRING'S CHAMPION SAFES,
FAIRBANK'S PATENT SCALES,
WAREHOUSE TRUCKS,

Cistern and Well Pumps, Corn Shellers, Clothes Horse Castings, Flat Iron Heaters, Charcoal Furnaces, Robinson's Patent Double-Acting Downward Draft Gridiron, &c., &c. Also Manufacturer of

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Of every description done at short notice, and on the most reasonable terms.

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PLANTING MACHINES.

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OVER THIRTY First Premiums awarded—and over *Fifty Thousand Acres of Land Planted* with them in 1855! Twenty Acres of Corn have been planted by one man with one of them, in one day! I challenge any man, with any implement whatever, to a trial test—either on *time, quality* or *expense* of planting. I will give any person *Five Thousand Dollars* who will produce its *superior*. I have cuts and descriptions of a

NEW MARKER,

my own invention, which will *save much labor in cultivating*, and which I will mail free to all who purchase my Planters.

Rights and Machines for sale. Send for a Circular.
J. HERVA JONES.
ROCKTON, Winnnebago Co. Illinois. Apr. tf.

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1856. [redacted] 1856.

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Together with innumerable too small and numerous to be mentioned, and too useful to be overlooked. We are now prepared to supply orders at Wholesale as well as Retail as heretofore. Country Merchants will take notice.

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WM. HAWLEY.
C. C. CHURCH.
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At Curtis' old Stand, near the Capital House.

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MADISON, Wis., Aug. 1856. tf.

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ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials, and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

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☞ TIBBITS & GORDON are the only Agents in Madison.

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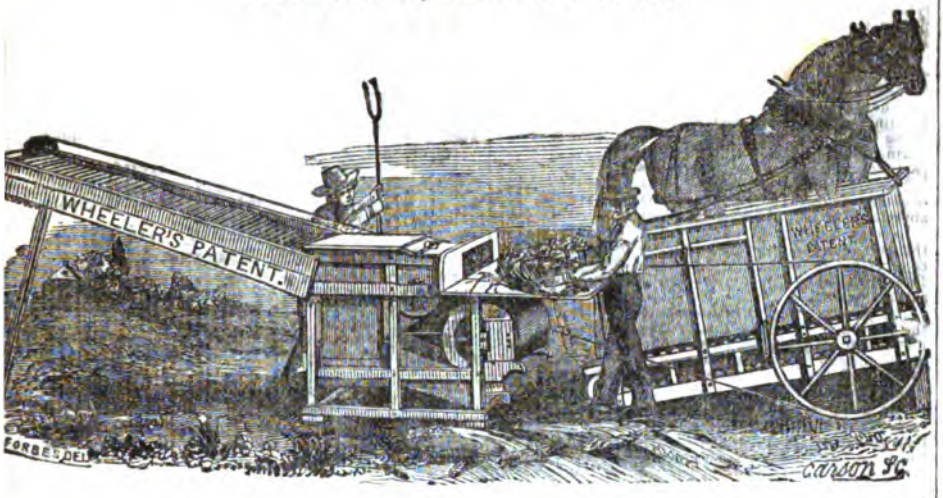

[*Double Power, and Combined Thresher and Winnower, in operation.*]

We are Manufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of Wheat or twice as many Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

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This Machine is like the preceding, but larger, and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price $160.**

WHEELER'S PATENT DOUBLE HORSE POWER,

AND

Combined Thresher and Winnower.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of Wheat and 300 bushels of Oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine. **Price $245.**

Also Clover Hullers, Feed Cutters, and Sawing Machines.

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☞ To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery 22 years, and have had longer, larger and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

☞ Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by the cheapest and best routes.

WHEELER, MELICK & CO.

MAY 1, tf. 1856. **Albany, N. Y.**

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SPLENDID FARM,

FOR SALE.

A FARM embracing 100 acres of superior Land, with several varieties of the best kinds of soils—about 40 acres under fence and plow, with about 10 acres of good mowing land—the balance timber and openings—lying half a mile from the city limits of Madison, and nearly three miles from the State House and Capitol Park, on Wyscora Creek.

The *Buildings* on it are convenient and comfortable—consisting of a good frame House, cellar, wood-house—a substantial frame Barn, Horse-stables, Cattle-sheds, Hen-house, a good log house, and other necessary out-buildings—with a good well, several fine springs, and a living Creek running through the whole length of the Farm, affording excellent water for stock on different parts of it, with plenty of excellent fish in it.

There is also, on the place, a large *bearing Orchard* of choice grafted Apple Trees, besides other fruit, with abundance of Strawberries, Raspberries, Currants, &c.

In short, there is no better or more pleasant farm in the country—with every convenience for an immediate comfortable *Home*, for a good family of means and stock. Possession can be had at once, or in October, as may best suit the purchaser.

The present owner is entirely suited and pleased with the place, and would be glad to keep it for a constant home; but his pecuniary circumstances will not warrant his keeping so valuable a Farm, and therefore he desires to *sell it soon*, to some one more able to own and enjoy it than himself.

The *price* is one hundred and ten dollars ($110) per acre, one third down, and the balance on time of three or four years; which is well known, by all acquainted with the place, to be very low, for one of such good improvements and advantageous location, as this farm possesses.

One half, or the whole, will be sold, as shall be desired by the purchaser. Enquiries may be made at the WISCONSIN FARMER Office.

P. S.—Horses, Cows, Tools, and the Crops on the ground, will be sold with the farm, if desired.

MADISON, July, 1856. tf.

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LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

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FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

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Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

SEACOR OR LAWTON

BLACKBERRY.

THE Undersigned would inform the public, that he will have a choice lot of the above Celebrated Blackberry Roots for sale, about the first of October next, coming so direct from their original source, as to leave no doubt of their genuineness They are undoubtedly the best Blackberry in the world, combining all the desirable qualities of large size, fine flavor, prolific bearing, great hardiness, and Easy Cultivation. We shall be able to furnish them individually, or by the dozen.

Price—[illegible] cents each, or $6 per dozen.

We will forward them, securely packed by mail, to those sending orders enclosing the money.

JAMES L. TOWNSEND.

CAMBRIDGE, Dane Co., Wis., Sept. 1, 1856. tf.

H. B. MERRILL & Co.,

(SUCCESSORS TO CORSS & MERRILL)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's ware, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c,

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishment the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

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LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

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FOR INVALIDS AND THEIR FRIENDS,

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor E. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

Terms for board and treatment, $9 to $12 per week. Excellent stabling and carriage room is provided for those who wish to keep their own conveyance. Circulars sent on application.

Address E. A. KITTREDGE, M. D.
Lake Side Water-Cure, Madison Wis.

July 1, 1856, tf.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. E. POWERS.

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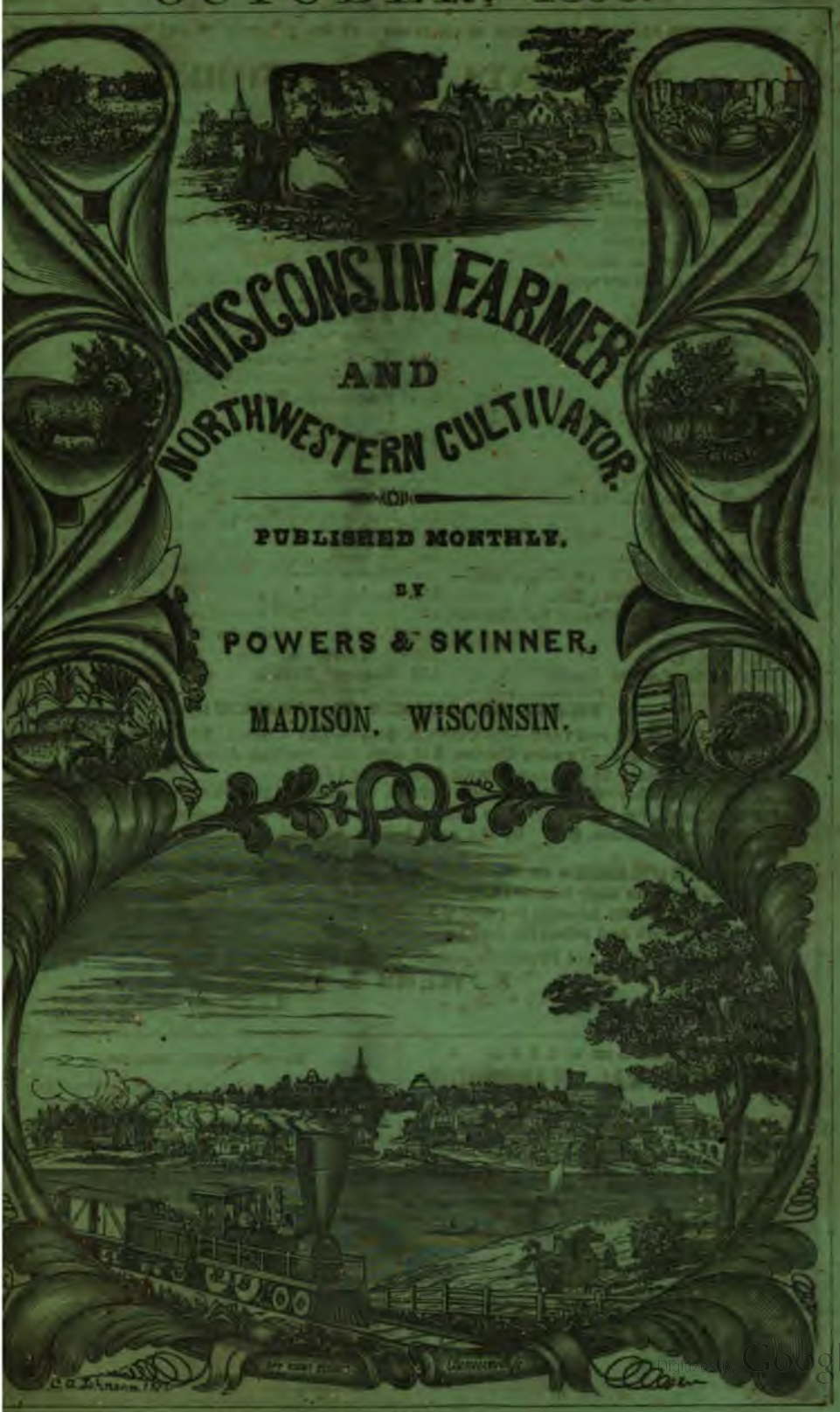
OCTOBER, 1856.



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Single Copies, $1 per year—Five Copies, $4,50—Ten Copies, $8—Fifteen Copies $12—Twenty Copies, $15, and one for the Agent.

All subscriptions to commence with January and July.

A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the Farmer is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

Specimen numbers and Prospectuses sent to all persons wishing them.

Address, **POWERS & SKINNER,**

MADISON, WISCONSIN.

D. J. POWERS, E. W. SKINNER.

Janesville

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—AND—

SEED STORE.

ELDRED BARROWS & CO.,

Wholesale and Retail Dealers,

HAVING opened an extensive establishment for the sale of Agricultural Tools, Farming Machinery and all kinds of Seeds—would respectfully call the attention of the Farmers of Rock and adjoining Counties to their Stock, comprising the *latest and best improvements*, purchased with care, direct from the most approved manufacturers.

We would invite a particular examination of our stock of Steel Plows—consisting of the Massachusetts, Chicago, Moline, Wisconsin, and other patterns. We have also a large stock of Horticultural Implements, from late importations.

Seed Department.

We shall give *especial attention* to this Department, and shall at all times keep a full supply of the choicest *Field, Garden and Flower Seeds* in their *season*, selected and put up *expressly for our own sales*, all of which will be sold *cheap for cash*.

Agents—for Eastern Manufacturers—Pitkin's Osage Orange Seed for Hedges, (with directions for raising)—and for the "Wisconsin Farmer."

CASH PAID FOR CLOVER AND GRASS SEED.

P. S.—To those dealers who purchase West of the Lakes, we offer every inducement to buy of us, as we can furnish all articles in our line at the lowest possible prices.

Corner of Milwaukee and River Streets, west side of the river.

Janesville Aug., 1856. tf.

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1855, Sept. 15.

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., OCTOBER, 1856. NO. 10.

SUGGESTIONS FOR OCTOBER.

"The Spring may wear its rosy blush,
The Summer bear its sunny flush;
But Autumn with its mellow hue,
Has charms we feel and know are true!
The laden bough perfumes the breeze
That cools the brow and lulls the mind,
And zephyrs whisper 'mong the trees
Of joys substantial and refined."—*MS.*

October may ordinarily be considered the last comfortable month, for most kinds of out-door operations, in our latitude and climate; hence it is liable to have a great deal of business crowded upon it, among farmers, gardeners and builders. Therefore, it is well for those who would be wise, and close up the campaign in good shape, on the first of this month, to take a careful survey of all their operations, and as far as possible, to systematically arrange their plans in such a manner as not to fail or be behind hand, in anything of material importance. Remember that what has got to be done, can usually be done in season considerably cheaper, and always a great deal better than after the proper time is past. Of this fact there can be no doubt to any one who will reflect back for a moment upon his own experience. To help those who may be slow of thought, we will suggest a few instances. Is plowing done any easier after the hot Spring days have set in, and teams are languid and weak, and everybody in a hurry? Are weeds subdued any easier, after they have got a week or two the start, or, perchance, after they have gone to seed, and paved the way for an increase of a thousand per cent. the ensuing year? Is grain harvested any easier or cheaper, after it has stood over time, and lodged and crinkled down, and withal got so ripe as to spoil the straw for fodder, and to cause a loss of perhaps one-fourth of the grain by shrinkage and shelling? Is corn any better for having stood in the field until all the birds of heaven, and beasts of the field have prowled upon it, and levied and collected their tax, of perhaps one half the crop? Do potatoes dig any easier or cleaner, for being left until the wet and cold season sets in, or may be until the ground is frozen. In a word, can anything be done as well out of season as in? No! one and all reply, and some perhaps are ready to say, we knew this all before. Very likely, gentlemen, we supposed you knew it; but the question is, *do you heed it?*

Reader, if you are a farmer, stop reading even for a few moments, and look mentally around your premises, and see if all is in order, and in season; and if anything is dragging, ask yourself if you had not better put on more help and push ahead, even if it costs a little extra effort and money. If you are a mechanic, it is all the same; look over your work and your jobs, and see if you have more on your hands than you can do; and if so, don't make new promises only to be broken, (an altogether too common thing,) but drive ahead while the season is favorable, work early and late, rather than be caught unprepared by winter.

And, gentle reader, if you are a lady and a housekeeper, improve the earliest opportunity to examine your home establishment, to see if all the requisite provisions are being made for a winter siege and blockade. Remember you have got a little army on your hands, to clothe and feed, until they can again be turned out to grass, in the Spring. See if your lord (if you have one) is thoughtfully and seasonably stowing away in the cellar, all the requisite vegetables for a winter supply, while they are in the market and can be obtained. Direct him to provide potatoes of some known variety, and good quality, at whatever price, instead of dealing in mongrel mixed varieties, often so poor as not to be worth cooking.

A good potato is a good thing, but a poor one is poor indeed—that's certain. Then the turnips, the beets, the carrots, the squashes, the pumpkins, the onions, the cabbages, and many other things, too numerous

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to mention; see that each and all of these are in their proper places, and duly secured for keeping and use. When the cellar is duly stored with all the requisites, then see that it is carefully banked and secured, against that burglarious old rascal who has so long and so often entered people's cellars, merely to do mischief; shut him out effectually, and in season. Next, look around the house, and see if the chinks and air holes are all stopped, if the windows and doors are tight and secure from rattling, when the wind blows. If all these things are not right, urge the matter until they are *fixed;* a strip of list that costs nothing, and a cent's worth of tacks, will often stop an open crack in a door or window, and keep out cold and damp enough in a single winter, to save ten dollars worth of wood, and perhaps a fit of sickness, and a Doctor's, if not a Sexton's bill, into the bargain. A house is peculiarly a woman's kingdom—whether made of logs or cut stone—and if she understands how to reign in it properly, she will insist on having all its minutiæ kept in order. That's so!

The next thing in order is the wardrobe, embracing all that little variety of articles that fashion and humanity need, from the crown of the head to the sole of the foot. And the woman who has a number of little soldiers to equip, with perhaps not very ample appropriations for the purpose, has no easy or idle task upon her hands. Making up new for the big ones, and cutting down old for the little ones, is the order of the day, (and often of the evening.) Then the stockings and shoes—what a lot it takes for a lot of feet! In the days when our good old-fashioned mother spun and knit, it was not so much of a mystery where they came from; but, alas and alack, for the little boys and girls, and men too, of the present day—how seldom they see a good warm woolen stocking, such as graced the feet of our boyhood, when mothers and grand mothers knit; when eleven brothers and sisters, filed right and left of us, in a good old-fashioned Vermont family circle, and all well shod by a mother's busy needles, after the household labors of the day were done; but that was before female health, and vigor, and industry, became ungenteel, or Patriarchal families went so entirely out of fashion. Our ancestors, poor home-spun souls, knew no better than to follow the simple dictates of Nature, and common sense, without anything like ample ideas of our modern refinement and gentility. Their ignorance was certainly their own fault, instead of ours.

We drop the subject of housekeeping for the present, by advising the good lady, after she has gone through with her own brood, if she has any garments left, that have any more wear in them, to give them to her poorer neighbors, instead of cutting them into carpet rags; recollect that the first Christian duties are charity and benevolence, and not *rag carpets;* and while you are on the subject, it might be well enough to look over your own surplus wearing apparel, and if perchance you have some dress too small for a hoop, or too much soiled for your own wear, ask yourself, sometime when a generous streak comes over you, if it would not be better to give it to some poor sister (who, mayhap, has not had a new dress in a year,) than to let it longer cumber your closet, or bureau? Such generosity would be marvelous we know, but still we don't think there would be anything wicked in it, especially if none of your fashionable acquaintances found it out.

Fall Plowing.—Amid the other details of fall work, few things are more important to those who mean to farm well, than fall plowing. One great trouble in our farming, is the fact that we do not till our lands enough. One shallow plowing in the Spring, with many a balk and dodge not plowed at all, is too often considered sufficient; but what right has any one to expect a good crop from such tillage. If it is obtained, it is the result of accident. Yes, gentlemen, such of you as would raise good crops from year to year, irrespective of drouth or wet seasons, must till your land thoroughly and deep, while your teams are vigorous and healthy in the fall. Speed the plow over stubble and corn-hill, and not only over but under them—the deeper the better. Yes, the deeper the better, even here among the rich soils of the West, except, perhaps, in some extraordinary instances. Turn up the furrows as deep and ridgy as possible this fall, and let them frost-slack through the winter. Keep everything off that can tramp in the least, if there is any clay or marl in its composition. Let it stand in that shape,

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and when spring comes we will tell you what further to do with it, to be almost sure of a good crop of wheat, oats, corn, or anything else that will grow in this country. Plow all you possibly can in the fall, for the purpose of lightening your labor in the spring, which at the best is always short with us, after the fields are dry enough to plow; besides, the additional consideration that teams are usually in the worst possible plight, to do any considerable amount of work. Mares are or should be in foal, and ought not to be over-worked. Therefore, speed the plow every leisure moment this fall—not only to save time in the spring, nor merely to pulverize the soil with frost, (which by the way is an all important thing,) but last though not least, to destroy the insects and vermin that have gone into winter quarters. Doubtless late fall plowing will be found to be our best protection against the increase of all such pests, in this new country. See article in this number on deep plowing as a preventive of drouth.

Ditching is an other occupation, that can be well attended to this month, by those who have over wet marsh hay lands. Cut the ditches this fall before it is too cold, and as the frost begins to come out in the spring, sow on the red-top or timothy seed, and hatchel it well with a sharp toothed drag, and we will warrant you a double quantity of grass, and of twice as good quality as the best wild grass that grows, by the second year. We are aware that this subject has not yet attracted much notice among our farmers, but it will soon force itself upon our attention, when we come to calculate closer upon the profits of stock growing, and dairying. We have had quite an amount of light ditch cut, during the present season, on very wet marsh, and have been surprised at the rapid disappearance of the surface water. Land that we could not drive oxen upon last year to draw off the hay, is now almost dry enough to plow; we have cut enough additional hay on it this season, to nearly pay for the ditches. Ditching in all such cases, will certainly pay largely and quickly.

Stock, &c.—Sort your cattle, sheep and other creatures early, and determine which you will winter, which you will fatten, and which you will sell as they are; then act up to your determination. Those that are to be fatted, should be started as early as you have the feed to do it with; cold weather is a poor season to stall feed profitably, and equally so for pork making, with ordinary western accommodations. Wintering old creatures is usually more unprofitable as compared with younger ones, than people ordinarily imagine.

Rigging up.—Perhaps we said enough in the last number about putting buildings and fixtures in order for winter, to render it unnecessary to again refer to it; but it is a subject of so much importance, and so large a proportion of people are so slack in such matters, that another jog on the subject, we presume, will not be labor wholly thrown away. Plan to have a good warm shelter for every creature you undertake to keep, old or young, two or four footed; if you cannot build good permanent and substantial ones, build such as you can; a rail pen, with a pile of straw thrown over and around it, is a much better shelter for pigs than none; and any kind of a rude but close hovel, is much better for all kinds of cattle, young and old, than an open shed, or may be no shelter at all.

Think of all these things, which relate to the comfort of God's creatures, ye Christian men and women, especially all those of you who claim to be *kind hearted* and *humane*, and to love God's creatures *before they are cooked;* and when the bleak winds of next winter are again howling around you, and the cold nights setting in, you will not be grieved at seeing any poor creature, that depends upon you, without a shelter and a bed, as warm and comfortable for it, as your own is for you. But such of you as do not heed our repeated admonitions on the subject, and let your creatures go into uncomfortable winter quarters, will recollect that it is not our fault. It is an undoubted fact, that many creatures actually froze to death last winter for want of adequate shelter; may it never occur again in this *Christian country*, so long as there is even straw and poles enough, with which to make hovels, if nothing better. We leave this subject now and until the November number, when we will again ask you if you have rigged good shelter for all of God's creatures around you, fit and suitable for their convenience and comfort.

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For the Farmer.

MANAGEMENT OF BEES.

MESSRS. EDITORS—Under this head, in your number for August, Mr. WM. F. CHIPMAN communicates what is doubtless intended to be an answer to the following question: "Is it possible for one ignorant of all practical knowledge on the subject, to successfully undertake the management of a few bee hives?" The question does not seem to me to be very definitely answered. The writer gives us his "*limited experience*," which amounts to nothing; because, by his own showing, he knows next to nothing on the subject, and besides, we are left very much in doubt as to the *result* even of these limited experiments. So far as he states it, I have no particular objection to make to his "winter management;" but if Mr. C., or anybody else expects to succeed with bees by "acting upon the principle of '*Let me alone and I will let you alone*,'" he is certain to meet with disappointment. Let your garden alone, and hope for a good supply of vegetables; let your sheep, your cattle, your farm alone, and hope for profitable results; but of this you may be positive, that if you thus neglect your bees, they will "*run out*," and if you seek for the cause of your failure, except from consequences which can be traced directly to neglect, you will certainly seek in vain.

I would certainly advise J. C. K. to undertake the management of a "few bees." Bee keeping can be made not only interesting, but very profitable. But if he expects to succeed, he must know the condition of his hives, and study the instincts of the Bee. There is no one science more inviting than this.

But the most important part of Mr. C.'s communication—the one calculated to do the most harm—is yet unnoticed. I refer to the information derived from a gentleman who says:

"There are two causes why bees do not do well, after having been kept for several years in one place. The first reason is, the country gets over stocked, so that the bees cannot obtain honey sufficient to winter on. But the greatest cause is, the practice of putting caps on hives, from year to year, thereby allowing the old comb to remain in the hive."

"He says that the bees put a new coat or lining over each cell, every spring. The result is, the cells soon become so small that they can neither deposit their honey nor lay their eggs in them; consequently, when the comb all gets old, the bees will soon begin to die. I also judge this to be the case," &c.'

These two points admitted, and the business of bee keeping might well be given up at once. But, fortunately for us all, Mr. C. included, these "*old wives' fables*" have long since been exploded. In the language of another, I confess that I find it difficult to repress a smile, when the owner of a few hives, in a district where as many hundreds might be made to prosper, gravely imputes his ill success to the fact that too many bees are kept in his vicinity. Travelers tell us that in Russia and Hungary, apiaries are not unfrequent, numbering from 2,000 to 5,000 colonies. Need we fear then, that any district of this country will be very speedily over-stocked.

But, "the cells soon become so small!" Hear what is said, by one of the most extensive bee keepers in this country: "*I once compared with other bees those of a colony more than fifteen years old, and found no perceptible difference.*"

I would caution all new-beginners against adopting the remedy recommended by Mr. C. To say the least, it is worse than the disease. After twenty years experience, I have never seen a hive of *dwarfs!* or where the cells were too small; and I am confident this evil, like that of over-stocking, is imaginary. I have no doubt that many a first rate stock has been ruined by attempts to change old comb for new.

In company with another individual, I have commenced an apiary in this city. We now have twenty-eight hives. We design to have 500. If Mr. C., or any other of your readers who are interested in this subject, should pass this way, they are respectfully invited to call. We have no "axe to grind," no "patent to sell;" but if I can be the means of imparting any information which shall be of service, it will be a cheerful contribution.

S. KENNEDY,

MILWAUKEE, Aug. 8, 1856.

A FOOL in high station is like a man on the top of a mountain—everybody appears small to him, and he appears small to everybody.

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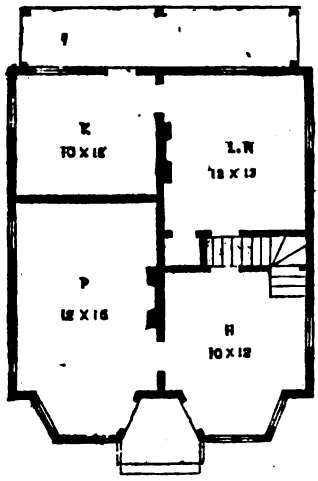
DESIGN FOR A VILLAGE OR CITY HOUSE.

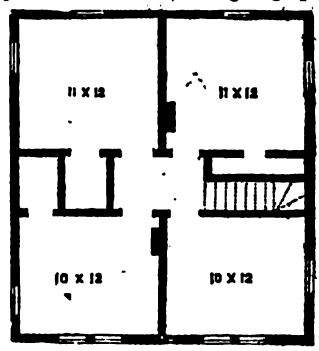
Having presented several neat and cheap designs for farm and cottage houses, and wishing to meet all views, tastes, and circumstances, we now offer an appropriate design for our young rising villages and cities; all of which are more or less disfigured by unsightly structures, projected and built by men who know nothing about their business, or about the fitness of things.



[FIRST STORY PLAN.]

This plan is not an expensive one to carry out, but neat and tasty inside, and modestly elegant outside. It could be greatly imprvoed to be sure, by enlarging enough to admit of a center front hall; but that would defeat the purpose of the design, which is to get up a small cheap house, not costing over $1,000 to $1,200, all complete.

The bay window feature in front, will be found to add greatly to its beauty; and the recess between them might easily be temporarily enclosed for a winter entrance, and the room that is marked H, for a hall, be turned into a sleeping room, which is much more comfortable for a family bed-room and nursery in cold weather, than going up stairs.



[SECOND FLOOR PLAN.]

The chamber is divided into four neat parlor sleeping rooms, each with a closet excepting one. Such sheds and extra appendages can be added in the rear, as taste or convenience may dictate.

We are indebted for the illustrations, to Wm. Backus & Co., of Chicago, Architects and authors of the popular work entitled "Village and Farm Cottages," previously referred to by us.

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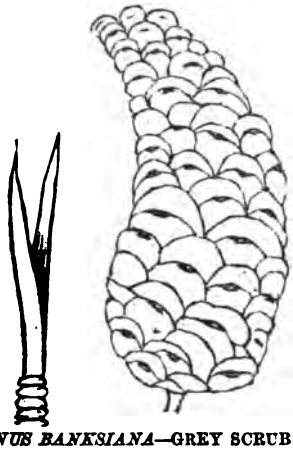
THE CONIFEROUS TREES OF WISCONSIN,

BY I. A. LAPHAM.

No. 46.—*Pinus Banksiana*, of Lambert—Grey Scrub Pine. The dells of the Wisconsin river is about the extreme southern limit of this arctic species of Pine, which extends thence farther towards the north pole than any other tree. It may be distinguished by the slightly curved cones with pointless scales: the short rigid spreading leaves, arranged in pairs in the sheaths, not more than about an inch in length. The tree is only from ten to twenty feet in hight, and is of little or no value, except perhaps for ornamental purposes.



46. *PINUS BANKSIANA*—GREY SCRUB PINE.

Figure 46 represents a cone and the leaves of the natural size.

No. 47.—*Pinus resinosa*, of Aiton—Red Pine. This is a large tree, the bark smoother than in the White Pine, the leaves more rigid, and the cones shorter and more solid. The leaves are in pairs each one half round, starting from long sheaths at the base. The cones often grow in bunches, are egg-shaped about two inches long, their scales without points are widened in the middle. The leaves are five or six inches in length. By these characteristics the true Red Pine which is often called by other names may be distinguished. It is a very valuable tree, often found growing with the other species of Pine, on the dry sandy ridges in the northern and central portions of the State. It takes its name of Red Pine from the color of the bark, which has a deeper red than any other species.

No. 48.—*Pinus mitis*, of Michaux—Yellow Pine. This tree is common about Green Bay, and on the bluffs of the Lower Wisconsin river, which may be regarded as the southern geographical limits of the species in this State. A few trees were recently (perhaps still) growing on a bluff of sandstone, ten miles west of Madison. But at the South this tree is abundant. It is valuable for lumber, timber, &c., but inferior to the White Pine, and far less common. The names of White and Yellow applied to the Pines, have reference to the color of the wood. From the Red Pine, which the present species most resembles, it may be known by the leaves, which are more soft and slender, and are channelled; the scales of the cones, slightly enlarged at the end, and tipped with a minute weak prickly point.

No. 49.—*Pinus strobus*, of Linnæus—White Pine. This is the common Pine tree from which most of the lumber is manufactured in the central and northern portions of Wisconsin, to supply the southern part of the State, Illinois, &c. It is undoubtedly the most valuable tree for this purpose in our forests. The southern limits may be regarded as on a line extending from the Sheboygan river to the north end of Lake Winnebago, thence to the falls of the several larger rivers to the St. Croix. There are also pineries on the head waters of the Lemonwier, and of the Baraboo.

The White Pine is easily distinguished from all the others by having five leaves together in each sheath; and by the long slender cones. Trees have been measured over two hundred feet in hight, and in Wisconsin they tower high above all the other trees of the forest.

As there appears to be some confusion and uncertainty among lumbermen about the different kinds of Pine trees, I have given above the peculiar characters by which they may be distinguished one from another. It is possible, but not very probable, that there may be other species in the pineries, at present unknown to me, as I have never penetrated far into that part of the State.

No. 50.—*Abies balsamæ*, of Marshall—Balsam Fir. This very fine tree is found only in the northern part of the State, extending south in the vicinity of Lake Michigan only

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as far as the Manitowoc river. The Fir and Spruce trees are separated from the Pines in the manner of growth of the leaves, which are scattered singly on the branches instead of being collected into bunches of from two to five from the same base. The resin of the present species is known as Canada Balsam, much used in medicine; and it has lately been employed by microscopists to give transparency to various objects under examination.

This tree is used only for ornamental purposes, not attaining sufficient size to be of much value for the ordinary purposes of timber, &c.

Mr. Downing recommends it as one of the most ornamental of our native evergreens, and especially for planting near the house. When standing singly, it forms a perfect pyramid of fine dark green foliage, thirty or forty feet high, regularly clothed from the bottom to the top. However small the plants may be, still they are interesting, as they display the same symmetry as full grown trees.

No. 51.—*Abies Canadensis*, of Michaux—Hemlock. This tree does not extend north of latitude 49°, and south of Manitowoc in latitude 44°. The bark possesses more value than any other part of the Hemlock, and large quantities are annually stripped off for the use of the tanner. The young boughs are used to supply a soft bed for surveyors and others exposed to the hardships of a "life in the woods."

The wood is much less valuable than Pine, though often used for joists, flooring, &c. It is a very elegant and highly ornamental tree, with long, gracefully drooping branches, and light tufted foliage.

The Hemlock is said to be but little injured by the pruning knife, and therefore makes a good hedge plant. By being planted in double or tripple rows, it forms in a few years an impenetrable evergreen wall, which would be invaluable for shelter from from the north-west winds of winter.

No. 52.—*Abies alba*, of Michaux—White Spruce. A light, pretty species, with small ovate pendulous cones, placed on the extremities of the branchlets. The foliage is of a light bluish-green tint, contrasting finely with the darker color of the next kind. Hence it makes a very valuable ornamental tree. The wood also is valuable when it can be found of sufficient size. In Wisconsin it is confined to a few of the most northern counties. The roots are long, slender and flexible, and are used by the Indians as thread, with which to sew together the bark canoes.

No. 53.—*Abies nigra*, of Poiret—Black Spruce. This is a dense, sombre looking tree, with blackish bark, hence properly named *Black Spruce*. For ornamental purposes, it should only be grown among other evergreens to give variety. For this purpose it possesses a peculiar value. It is found only in the northern part of the State, where it is not very abundant. But it forms a large proportion of the forests of some of the Eastern States. The timber is valuable, being used for yard-arms, keels, &c., of vessels; knees are made of the larger roots and a portion of the trunk. The wood is said to be equal in many respects to the best species of pine.

The cones are oval and are placed near, but not on the ends of the branchlets.

No. 54.—*Larix Americana*, of Michaux—Tamarac. In some States this tree is often called Hackmatack, which is probably only a corruption of the name by which it is now almost universally known. It is more or less common throughout the whole State, though rare in the south-western counties. It prefers wet grounds, which are not common in that part of the State.

The wood is very strong and durable, well adapted for posts, rails, poles, railroad ties, &c., &c,

Foreign writers usually call this the American Larch, to distinguish it from the European species known by that name. That tree is of larger growth, and is much esteemed as a timber tree. It is also far superior to the Tamarac as an ornamental tree, the leaves being longer, and the beautiful red cones of much larger size.

No. 55.—*Thuja occidentalis*, of Linnæus—American Arbor Vitæ. This very common evergreen tree is usually called White Cedar, a name that more properly belongs to another tree found farther south, but which does not occur in Wisconsin. It usually prefers wet grounds, and is found on the borders of Tamarac swamps, &c. Steep side

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hills, especially if wet, are often ornamented by this fine tree. The wood is durable, and often used for fence posts, railroad ties, &c., where it is said to last two or three times as long as most other kinds of wood. It is a very valuable hedge plant, and especially for high screens to protect gardens, &c., from the cold winds.

No. 56.—*Juniperus Virginiana*, of Linnæus—Red Cedar. The Red Cedar grows on the borders of small lakes and rivers, but not very abundantly in the southern parts of the State. At the north it is said to be more common. While most of the Junipers are low and scraggy bushes, this one attains the dignity of a tree. The excellent qualities of the Red Cedar make us regret that it is not more common with us. The wood is strong and very durable, consequently suited for railroad ties, and for other purposes where wood is exposed to the dampness of the ground.

Like several other evergreens, it has been recommended as a hedge plant and for screens against winds. The branches extend horizontally from near the ground, thus rendering the protection more complete.

The regret expressed by Mr. Downing that the fine evergreen trees, both of this country and of Europe, which composed the Pine and Fir tribes had not at the time he wrote received more of the attention of planters, would now in some degree be spared; for through the influence of his own publications increased attention has been given to the subject. He pleads eloquently for them: "It is indescribable how much they add to the beauty of a country residence in winter. At that season when, during three or four months the landscape is bleak and covered with snow, these noble trees, properly intermingled with the groups in view from the window, or those surrounding the house, give an appearance of verdure and life to the scene, which cheats winter of half its dreariness. In exposed quarters, also, and in all windy and bleak situations, groups of evergreens form the most effectual shelter at all seasons of the year, while many of them have the great additional recommendation of growing upon the most meagre soils."

Begin life with but little show; you may increase it afterward.

THE COST OF BUYING AND STOCKING A FARM IN WISCONSIN.

[The following estimates and calculations in reference to starting a home in the West, were handed us by a friend. They seem so practical, and so near what many wish to know, that we deem them worthy of publication. EDS.]

DEAR SIR: In compliance with your request I make a little computation of the outlay required in Southern Wisconsin to buy a farm of 100 acres, and also the expense of stocking and starting the same, in a proper manner for a home, and for profitable cultivation.

A farm of one hundred acres of medium quality of land, partially improved, with 50 acres plowed and fenced, with a comfortable cheap house and stable, and not near enough to a large town for a fancy value, could be bought for $16 per acre, cash - -	$1,600
A good substantial low-priced horse team, including harness and wagon at	360
Plow, drag, cultivator, and small tools to start with, - - - - - - - - -	150
5 cows at $30 per head, - - - - -	150
Other animals, including pigs, poultry, &c., &c., - - - - - - - - -	50
Household furniture, stove, &c., usually necessary to be purchased by those who come from a distance, - - -	100
Incidentals, accidentals, and expenses that cannot be foreseen or enumerated,	100
Making an aggregate amount of -	$2,500

The above estimate I consider a sufficient expenditure for any economical farmer and family, with which to commence in a comfortable condition, in any of the medium counties of the State.

If one's means are moderate, one half of that sum can be made to answer every purpose, by going to the newer portion of the State, and purchasing as good but cheaper land—by substituting a yoke of oxen for the horses and harness, and starting with 3 cows instead of 5, &c., &c.

The first estimate will situate a farmer well, in almost any of the rural districts, where school, social and business privileges can all be enjoyed, and a Rail Road Station be reached within a convenient distance for market purposes.

A word further as to what an industrious man can do on such a farm with average

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crops and prices. With 50 acres under the plow, as follows: 30 acres in wheat, with an average yield of 20 bushels per acre—making 600 bushels, which ought usually to bring $1 per bushel, - - - - - $600
10 acres of oats, at 40 bushels per acre, 400 bushels, at 30cts per bu., - - 120
6 acres of corn, 240 bushels, at 40cts, 96
2 " potatoes, 200 " at 25cts, 50
2 " garden and miscellaneous crops, 50
Calves raised and growth of the stock, 40
One colt raised, (as the horses should be mares,) - - - - - - - - - 40
Advance in the value of the farm, per acre, say $3 per annum, which is a low estimate for good farming land, 300
Making an aggregate of - - - - $1,296
From which, (if the farmer has no sons to assist him,) deduct, the wages of a good farm hand for 6 months at $15 per mo., $90
For horse shoeing and repairs, - - 10
For keeping teams, stock, &c., and grains for family use, say - - - - 300
For cost of seed, - - - - - - - 80
Unlooked for items, - - - - - - 116
Total expense being, - - - - - - $596
Leaving a balance of, - - - - - - $700
at the close of the year, with the land only half under tillage.

I would say that I have allowed nothing for family groceries, and the like; but offset the butter, eggs, poultry, &c., against them, which are ample, if the wife is a prudent and thrifty manager.

In conclusion I would say, that perhaps I have omitted some items, but I believe the computation is sufficiently correct, and shows a good fair reward for Wisconsin farming. *

TRIAL OF MOWERS, AT HEMPSTEAD, L. I.

A trial of Mowing Machines was had at Hempstead Branch, on the 30th of June. We are advised by John Harold, Esq., Secretary of the Society, under whose direction the trial was had, that nine machines were on the ground, and the trial took place in the presence of four hundred farmers—half an acre being cut by each machine. The committee, after careful deliberation, report, Burrell's Machine, entered by Mayhall, has the lightest draft, but not doing as good work; that Manny's Improved has the preference for cleanness of cutting and best adapted for farm use; Whitenack's Jersey Machine cut equally clean, but had no lifting apparatus; Weeke's Patent cut next best; Allen's Patent doing good work, but not as convenient to move about as Manny's.

THE MONEY OR COMMERCIAL VALUE OF A MAN.

A very curious and original article is the following:

In case of the idiot, we have the body alone distinct form the mind. What has he cost? What is he worth? Principal and interest invested in his body, that is, his food, clothes, etc., with interest on their cost, will overreach $1,000 by the time he is twenty-one. The average cost, with interest, of raising any person to the age of twenty-one, will equal $1,000—this is invested—what is the investment worth? It will cost $100 per year to support him.

To this body add a mind, and in what an extraordinary ratio has the person's value been raised. He can now earn, suppose $300 per year, that equals $400 above the value of the idiot, which is to be set down to the credit of mind.

Now add education, perfecting him from birth to maturity, and what can he earn? Is $1,000 per year too much to allow? That is $700 more than the uneducated man is allowed; and how highly must we rate the expense of education? It could not overgo $700, which therefore yields 100 per cent. People usually count the cost of growth and sustenance of body as part of the expense of education, but this should never be done; a clear distinction should always be made between the expenses to be charged to the body and those to be charged to the mind, and as clear a distinction should be made in case of the credits, for at once some very practical truths would be thus exhibited.

Perhaps the following table will present the truth in a conspicuous manner:

Body, costs up to 21 years, ...	$1,000	
After that, ...	$100	per year.
Mind, costs up to 21 years, ...	000	"
Gains after that, ...	300	"
Education, costs up to 21 years, ...	700	"
Gains after that, ...	1,000	"

It is also to be noticed that the uneducated man is more valuable in middle age than in advanced years; but the educated man grows more valuable as years increase, so, that if he begin life with earning a sum which represents the interest of $10,000, he will find his income to double quite as soon as if his capital were gold.

These figures are not fanciful, they are, of course, a certainty given for an uncertainty, and, merely for illustration, they may be exchanged for any other to please any caviller, but any fair test of the truth will prove that education will pay more than 100 per cent. upon its cost.

It would appear, then, that any man who would reckon up his investments must, to what he has in lands, cattle, implements, etc., add at least $1,000 for every mature child he has raised, and if he has added to

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the child a good education, he has changed this otherwise unprofitable investment into a fortune of not less than $10,000. Now every principle of commercial policy, or of political economy, would dictate that we should add a little to any investment, if we can thereby save the whole, and much more readily should we do it if we can turn the whole into the most profitable of all investments; and what investment is there which will pay, as well as brain, mind, and education combined do?

Let us apply this idea to the State of New York: It is rich in more than a million of children. Suppose the amount already invested in them to equal $500 each, the sum total would be $500,000,000. To change this vast sum into a paying investment, it is only necessary to give each a good education; when suppose their increased value to be only $500 per year, their collective value would represent the interest on a capital of more than $7,000,000,000. Would not the taxable wealth of the State be increased by every farthing of such an amount, however astounding it may seem? Whence comes the taxable wealth of the State? Is it not from the developed resources of nature? Let every person be well educated, and the mind of man has not conceived, and cannot conceive, of the result. Educated minds sow each other with fruitful seed, and more than twice the number of ideas will be produced by two minds that can be by one alone. Let every one be well educated, and all must work, all will be willing to work, for drudgery will be reduced to its minimum, and one or two hours' labor per day will give everybody more comforts than any one now enjoys, and of course there will be plenty of time for mental cultivation and converse.

Thus it is seen that the expression "the wealth of a State consists in its citizens," is literally as well as figuratively correct.

More than three millions is the number of our population, invested in whom will be found more than three thousand millions of dollars, a greater sum than all the other "valuation" of the State, and, if properly treated, an admirable investment. This property is not merely personal—it belongs also to the public; and in the health and life of each person every other citizen has an interest. A death ere old age is a public loss, to be sure like the drop in the ocean, yet it is one of the elements of public prosperity. If the person, however, can not or will not return as much as he consumed, his death is a commercial profit to community.

We have thus reached three important conclusions, all of which, collectively, may, however, be counted as one, viz:

The wealth and prosperity of a State consists, 1st, in the number of its healthy, able-bodied citizens, 2d, in the association of mind with the body, and 3d, the thorough education of each mind.

But the novel train of thought we have been following out has brought to light and illustrated several truths, which indeed the logical mind would immediately infer.

If a farmer should raise stock and give it to his neighbors, his farm would grow poorer and theirs richer. But the human brain is the most expensive stock that can be raised. A single brain is the concentrated essence of much land; it is very easily transported, and its possession is very desirable. The transfer of any able-bodied person from one section to another is a transfer of so much property as is invested in him. If uneducated, he is a thousand dollars drained from one and poured into the other. Emigration must, therefore, impoverish one as much as immigration enriches the other. If the persons moving are educated, so much the worse for the one and better for the other.

The West, therefore, must become rich, not so much from the richness of its soil and productiveness in cereal grains, as from the direct wealth in the commodious form of ready grown brains poured gratuitously into its lap. If a State receive 100,000 inhabitants by immigration, it is the same as receiving $100,000,000 in the best possible form. (In a new country, muscles are worth more in proportion than in an old section.) So far as this emigration is from the East, it is the loser, and its only resource is to draw wealth in some form elsewhere, the most commodious and advantageous form is immigration. It is with a country as with an individual; no one can rapidly become rich by the development of its own resources, but if it can by any means *gather* the riches of many countries, it rises correspondingly in the scale of wealth.

Great Britain would, ere this, have been completely impoverished, if she had not by commerce tolled all the nations of the earth, and, by enslaving whole tribes, poured out their life-blood on her shores, and thus re-fertilized a soil constantly exhausted by the rich brains transferred to our inviting land. Thus has Jonathan insidiously drawn from his imperious father John, who cut him off without a cent, his full inheritance, and even in boyhood became very rich, compared with those who raise their own labor, while other nations, who have been pouring their treasures in the most lavish manner upon us, wonder at our unprecedented prosperity.

With this idea in mind compare the South and North, and our reason for the greater wealth of the latter will at once be seen, and of the Southern States it will be seen why those which raise the labor, even if they sell

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it, must be comparatively poor, while slaves can be imported at half the cost of raising them; the wealth of a country *receiving* them will correspondingly rise, but when that resource fails, some other means must be taken to *gather* wealth—*gather* is the key-note to wealth. Produce is an old fogy—honest, conservative, Christian, but a slow coach.

The facts of immigration exhibited during the past year are of great commercial importance to our whole country, while those of emigration are of unprecedented importance to the financial interests of the *State*. The immigration into New York during the past year is nearly 200,000 fewer than during the preceding year. If these persons should be valued at only $500 each, the total in which our country has suffered is not less than $100,000,000. Immediate measures should be taken to correct an evil of such magnitude, extraordinary provisions should be made for the comfort of immigrants who land on our shores, and to re-induce the current of wealth which has been stayed by the well-meant, but evil-working, operations of the past year or two.

There also should be established throughout our land evening schools, and every means to turn this great material basis of wealth into the richest investment possible.

All history will show that the material and the mental prosperity of nations, their activity and position in respect to influence, has corresponded with immigration. The Assyrians, the Greeks, the Romans, the English, and still more ourselves, are examples of this truth, which arises from two roots. *First*, immigration is the most profitable mode of gathering wealth; and *second*, the mingling of blood, derived from various sources, enriches the products. Again, the the burning of powder, the sinking of ships, the demolishing of forts, the ravaging of cities, the provisioning and clothing an army, are not the chief expenses of a war. No, but the amount of property in brains destroyed is also to be counted, and it will be found the most important item. Every person killed in the Crimean war is to be counted as a thousand dollars destroyed. It is also to be considered that a man cannot be replaced in a moment—brain is a product of manufacture requiring years for its perfection, and the whole world will suffer from the loss experienced in any war.

In every view which we can take, it will be seen that man is a composite quantity, body and mind being the compounds; the body being the engine, the mind the engineer; the body a machine, the mind the superintendent; both are required for execution—the engine must be good, the engineer well informed, in order that the greatest profit may be rendered by both, or either.

Thus does a consideration of man in a commercial aspect lead us through a train of thought none the less correct, because new and interesting, to conclusions none the less to be received, because they startle us by their magnitude and their immediate, practical, and personal application.

[Hunt's Merchant's Magazine.

DEEP TILLAGE VS. DROUTH.

"Everything seems to be drying up," is the remark of many a farmer about these days. "Grass, barley, oats, potatoes and corn, are suffering much for want of rain." It is too true—they are "suffering much," especially late-sown barley and oats. Unless we have rain, the straw will be short and the product a meagre one. But it is useless to talk of this; we would rather offer some hints on the best means of escaping the effect of these "dry spells"—these weeks and months when little or no rain falls upon the parched and thirsty earth. It is not a new subject with us—but its importance will excuse repeated reference "line upon line, and precept upon precept."

One of the most effectual preventives of the effects of dry weather upon the crops *is a fresh and mellow state of the soil in which they are growing*. To attain this perfectly, there is but one way—frequent stirring and cultivation—but it can be greatly promoted by a proper preparation of the ground before the crop is sown or planted upon it. If land is deeply plowed and thoroughly pulverized, and at the same time prepared, either by the nature of the subsoil or under draining, for the ready passing off of all surplus water, it will remain for a long time in a moist and mellow state. But shallow plowed land, or that with a retentive subsoil at a short distance below the surface, is always found to become comparatively sterile under the influence of dry weather. A heavy rain falls, completely saturating the mellow portion of the surface soil, making it too wet for the favorable growth of plants at first, but the surplus water has no outlet through underdrains or a porous subsoil, it must pass away by evaporation, and the surface becomes baked and hard under the process. Whereas, had the soil been deep and mellow a larger portion of moisture would have been retained; the surplus would have readily passed off and the earth have been left in the condition most favorable to rapid vegetation.

The effects of deep and shallow tillage upon the moisture of the soil is readily observable by every farmer. We have had occasion to notice it since commencing this article. Taking up the hoe as an interlude to the pen, we found in spots where the plow had but just skimmed the surface, that the soil was baked and dry at least six inches

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deep (as far as we dug among the stones,) while not three feet distant where well plowed, at two inches deep it was moist and fresh. Passing through the corn-field we found the hills near stone-heaps or stumps were wilted, and almost burned up by the heat, while those on the open and well-plowed space around were fresh and vigorous. The fineness of the soil also has considerable influence; anything like lumps, however small, will not retain moisture like that well-pulverized and deep. This may be frequently noticed on head-lands where the soil is always in finer tilth from the more frequent passage of the plow, &c.

Some years since in preparing a piece of ground for the crop, a portion of it was thoroughly subsoiled so that the whole soil was stirred to the depth of eighteen inches and made fine and mellow. The remainder had only the usual preparation—and to this day a slight drouth affects the shallow part, while one long continued and severe is scarcely felt by the crops where it was deeply tilled. In a greater or less degree, this is found to be the case on all soils, and proves conclusively that subsoiling is not for one year—that its effects will continue for many years. It has been found, we would remark, that plowing ten inches in depth, or even eight, upon a *porous subsoil*, would act very beneficially in preventing the effects of drouth.

Hoed crops need not suffer so severely from dry weather as spring grains and grass must do. The soil must be kept clean and mellow by frequent cultivation, which all farmers and gardeners know is very beneficial in this respect. It is true that the evaporation of moisture is the greatest from a light soil, but it is also true that it receives moisture more readily and largely from all the sources which supply it. There is little or no dew upon the beaten path, while the grass at its side drips with wet. The fresh turned earth receives a much larger supply than that upon which a hard crust has formed—it penetrates farther, and hence passes off more slowly. Of light showers this is also true. Hence the more mellow the soil the less it suffers from lack of rain when covered with growing plants.

Deep and thorough tillage is the best preventive of the effects of drouth—and the best preparation for growing profitable crops, whatever be the character of the soil or weather. [Rural New Yorker.

False Happiness.—False happiness is like false money, it passes for a time as well as the true, and serves some ordinary occasions—but when it is brought to the touch we find the lightness and alloy, and feel the loss. [Pope.

For the Farmer.

EXHIBITION OF TROTTING AND ROAD HORSES. 1855.

Eds. Farmer—The Legislature not having made any provision for publishing the Transactions of the State Agricultural Society, it has been deemed advisable by the Society to publish all its more important proceedings in the Wisconsin Farmer; thereby laying them early and extensively before the public, and at the same time placing them where they will be longest preserved and most convenient as a record for future reference.

The exhibition of Trotting and Road Horses, which gave such universal satisfaction not only to spectators but exhibitors, will form the subject of this communication, from the fact that a similar one will form one great feature in the coming Fair of 1856, and I consider it essential that a record of each should be separate and distinct, as they may each be needed for reference at any time for years, perhaps a century hence. In preparing the Premium List for 1855, for Horses, the Executive Committee had two objects in view; one was to encourage the raising of a class of horses valuable for all the business purposes of life—one which should command the highest market price for pleasure or work, at the same time to make the *public performance* of each horse the *test of his merit*, and thus do away with the too prevalent complaints of *partiality*, so freely (and too often unjustly) ascribed to that portion of the public who act as judges at our State fairs. To accomplish these ends, the Executive Committee arranged all other classes of horses about as usual, and classed the Trotting and Road Horses, with the premiums for each, as annexed. It would perhaps be as well to state that the trial took place on the Cold Spring Course, which was leased expressly for this trial for one day, and is one mile in circuit. A rain of some days duration had only partially dried off, and competent judges were of the opinion that some seconds better time would have been made in every instance, had the course been in perfectly good condition. As it was, the record shows that Wisconsin farmers may now point to the performance of their stock of horses, with as much and as laudable pride as to the quality of their wheat, both of which, after being fairly

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tested, stand Number 1. in market value.

PREMIUM LIST OF 1855. TROTTING AND ROAD HORSES.

For the best Trotting Stallion which has been kept as a Stock Horse within this state the past season, first premium, ... $100.00
2d best do 50.00
3d do do 25.00

For these premiums the following horses paid entrance, and trotted in the time annexed. (Entrance for all premiums in this class, 10 per cent.)—

Owner's Name.	Horse's Name.	Time. min. sec.	Premium.
C. J. Bullock,	North America,	2. 50,	$100.00
D. J. Woodware,	Yankee Bill,	2. 57,	50.00
John Gale,	Bucephalus,	2. 59,	25.00
A. H. Norton,	Grey Stranger,	3. 6½,	——
S. B. J. Davis,	Barney Boorsem,	3. 6½,	——

For the best Trotting Stallion 5 years old or under, the spring of 1855, a premium of $25.00
2d best do 15 00
3d do do 10,00

For these premiums the entries were made as follows:

Owner's Name.	Horse's Name.	Time. min. sec.	Premium.
Adam Armstrong,	David Hill,	3. 9	$25.00
J. E. Mosher,	Red Reuben,	3. 11	15.00
Wm. L. Uttley,	Green Mt. Boy,	3. 19	10.00
O. E. Huntley,	Black Weazel	3. 27	——
Geo. Nickerson,	James Bird,	3. 30	——
Patrick Doyle,	Green Mt. Boy 2d,	3. 31	——
Alex. Galarnean,	Young Beaudwin,	3. 34	——

For the best pair of Trotting Horses or Mares owned in the State, a premium of $50.00
2d best do 25.00
3d do do 15.00

The above premiums were awarded as follows:

		Time.	Premium.
1st, C. H. Porter & Co.	pair,	3min. 20 sec.	$50.00
2d, S. B. J. Davis,	do	3min. 30 sec.	25,00
3d, E. Kinney,	do	2min. 37 sec.	15.00

It is due Mr. Kinney to state that he had a fine and fast pair of matched horses, which were driven by a person unused to them, in consequence of the owner being ill; they were capable of a different rate of speed.

For the best Single Trotting Gelding or Mare, owned in the State, a premium of $25.00
2d best do 15.00
3d do do 10.00

Entries for the above premiums were made as follows:

Owner's Name.	Horse's Name.	Time, min. sec.	Premium.
Geo. Nickerson,	Corn Cracker,	2. 50½	$25.00
I. Hathaway,	Nelly Bly,	2. 51½	15.00
Gilbert Dutcher,	Catawba,	2. 56	10.00
Caspar Rouse,	Brown Bob,	3. 7	——

The performance of the different horses as above is copied from the record made at the time, by the judges and time keepers, and can be relied upon as correct.

Very respectfully yours, &c..

GEO. O. TIFFANY,
Sec'y State Ag'l. Society.

STATE AG'L. ROOMS, Madison.

WHY IS SUGAR SO DEAR?

The following extract from the N. Y. Journal of Commerce, explains the reason why sugar and molasses are so dear, and still on the rise at that. It appears that the crop of sugar in Louisiana, (which, by the way, is about nine-tenths of the whole amount grown in the United States,) was over four times as much in the year of 1853 as it is expected to be the present year. Add to this the immense increase of consumption in that time, and the matter is fully explained. At least three-fourths of the sweets we use for the coming year, must be imported from Cuba and elsewhere. 822,000,000 pounds of sugar to be consumed in a singly year, is not a small lot; about 30 lbs. to each man, woman and child in the land—saying nothing about some 40,000,000 lbs. of maple sugar, not reckoned into the account. Surely a nation whose inhabitants use up luxuries at this rate, especially when we include the tea and coffee that it takes to go with the sugar, can hardly be considered poor livers or paupers. We see no prospect of sugars being any cheaper for the next year at least. It strikes us as more likely to be higher:

"The New York sugar market is at present in an anomalous condition, the threatened scarcity and prevailing high prices having caused an accumulation of sugars here, to the value of nearly $9,000,000, according to present rates. The following comparison shows the excess of stock on hand on the 1st inst., in contrast with the condition of the market at the same time last year:

	Hhds.	Boxes.
1st August, 1855	39,649	22,845
" " 1856	66,000	14,000

The principal markets from which supplies are usually drawn, are now comparatively drained, but the high prices ruling here must continue to attract such stock as can be reached before another crop is received. The following table shows the estimate of the Louisiana sugar crop for the present year, upon which the apprehensions of scarcity are chiefly based:

	Hogsheads.
Crop of 1854	346,685
" 1855	231,426
" 1856	180,000

With the high natural advantages for the cultivation of the cane enjoyed in this country, it is a matter of regret that our advance in this particular has not been more decided, that the improvement of our resources might be in some degree commensurate with our increasing demands. A failure in the crop

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of the United States is invariably followed by an undue advance in Cuban sugars, advantage being taken of our dependence, and the comparative monopoly enjoyed.

The N. O. Crescent of the 30th ult., publishes a statement respecting the sugar crop "from one of our most intelligent planters," of which the following is an extract:

'The consumption of foreign sugar for the year ending the 30th of June, 1856, cannot be known until the publication of "The Report of Commerce and Navigation" is made in December next. The consumption of foreign sugar in the United States in 1855, was 440,000,000 of pounds. Of domestic sugar, crop of 1854, 382,000,000 of pounds. Total consumption of 1854 and 1855, 822,000,000 of pounds.

Assuming that the consumption of 1855 and 1856 was as large as that of the previous year, the import and consumption of foreign sugar would have been 559,000,000 of pounds. Taking this as a basis of a calculation of the consumption in 1856 and 1857, and assuming a product in the United States of 100,000,000 of pounds, the quantity to be imported in 1856 and 1857 would be 722,000,000 of pounds.

The import and consumption of foreign sugar of the United States was, in 1854-'55, 440,000,000. If an import of 722,000,000 is required in 1856-'57, it will exceed the imports of 1854-'55, 332,000,000, or 75 per cent. more will be required from abroad than heretofore.

It is assumed that the crop of sugar made in the United States, in 1856, will not exceed 100,000,000 of pounds. Owing to the diseased condition of the sugar cane of Louisiana, the crop has fallen from near 500,000,000 of pounds in 1853 to 250,000,000 in 1855; and no well informed person can think the crop of 1856 will go over the estimate of 100,000,009.'

Introducing the above, the N. O. Crescent says:

In making up estimates, the quantity of sugar that will be produced this season must, in our view, be considered as about one twenty-sixth of the production of the world, that is considering this season's yield to reach one hundred thousand hhds. of one thousand pounds each. The production of the world for 1856 is assumed as reaching one million two hundred and ninety thousand tons; allowing fifty thousand tons as the crop of Louisiana. The consumption of the world for this year we place at 1,380,000 tons; production, 1,290,000 tons; leaving a deficiency of 90,000 tons.

THE common trinkets of literature are constantly changing their form, but its diamonds are never out of fashion.

For the Farmer.

SMUT IN WHEAT.

MESSRS. POWERS & SKINNER—As there has been much said about smutty wheat, many causes assigned, and many preventives used by different individuals, and none as yet satisfactory to me, I propose to set the scientific world to speculating on this subject, by stating one or two circumstances that have come under my observation. A year ago last fall, two individuals in this vicinity sowed wheat taken from the same bin, both sowing their wheat the same day; their lands were very much alike, being only half a mile apart. Neither used any preventive, nor was there any smut in the seed. Now, mark the result: In one field the wheat was the smuttiest I ever saw, while in the other there was none to be found. Will not some of our scientific men speculate a little upon this matter?

I will now state another case, as related to me by a neighbor of mine, who says, he once knew a field of wheat of 30 acres, where, when the owner had sown all but four acres, there came up a very heavy rain; the remaining four acres were sown immediately after it had done raining, and dragged in while the ground was very wet. My informant helped harvest the wheat, and says that the four acres were at least one half smut, while there was no smut to be found on the rest of the field.

Now I ask, what could have been done to that wheat, to prevent its smutting? I should like to hear more upon this subject. I think the cause assigned by your Waupaca correspondent could not have been the cause of smut in these two instances.

Yours respectfully

WM. F. CHIPMAN.

WARREN, Waushara Co., Sept. 1, '56.

THE LINE OF PERPETUAL FROST.—The heat does not ascend as we rise above the earth nearer to the sun, but decreases rapidly until beyond the regions of the atmosphere, in void, it is estimated that the cold is about 70° below zero. The line of perpetual frost at the equator is 15,000 feet altitude; at 13,000 feet between the tropics; and 9,000 to 4,000 feet between the latitudes of 40 deg. and 59 min.

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LIMING WHEAT, AND SOWING AND DRAGGING WHEN WET.

A year ago last spring, we had occasion to wash our seed wheat; and before sowing we limed it. But at length we got out of lime, and being in a hurry to finish up before a storm, we continued sowing the wet wheat without lime; and to cap the climax, it also soon began to rain, and continued to until the ground was pretty well wet. Just at this juncture, some of our neighbors came along, and at once advised us to desist from dragging until the ground and wheat were dry—assuring us to a certainty, that we should reap nothing but smut, if we sowed wet seed, or dragged the ground when it was wet. Had it been convenient, we should at once have desisted; but we concluded on the whole to go ahead, and did so, completing the field in its wet condition.

For the purpose of knowing how the experiment would result, we stuck a stake between the dry dragged and limed wheat, and the wet unlimed and wet dragged wheat; taking it for granted according to our neighbors' prophecy, that the one side would be good wheat, and the other smut. But to our surprise, as the field grew and ripened, we could see no difference whatever, in the appearance or result of the crop. Whereupon we concluded that our neighbors, though usually pretty reliable, were sometimes mistaken, and that although it is doubtless a bad plan to work wet soil, yet it will not always destroy a crop. Eds.

DODGING AND DOING.

Dodging is an art of universal application. It enters into politics as an element of use and necessity. Dodging will try to escape just responsibility; Doing will go to work and lift the load. Dodging will contrive to draw its neck out of every yoke; Doing will walk up to the rack and face the music. Dodging will hide property or change residence to escape the just taxes which should be equally borne; Doing will be willing to be taxed for the securities of home, law, government, and schools. Doing reminds us of a man always upright, always honest, always straightforward in speech and in act; Dodging reminds us of the poet who says:

"Here lies old Dodge, who dodged all good
In trying to dodge the evil;
But in all his dodging, dodge which way he would,
He could not dodge the d—l."

For the Farmer.

WHEAT WILL TURN TO CHESS.

Messrs. Editors—If you think the following worthy of a place in your valuable journal, you are at liberty to publish it. Mr. Horace Clemans says, (April No., 1855, page 100,) "I am satisfied that chess produces chess, the same as wheat produces wheat. I am satisfied that chess can be produced in no other way."

Others are of the same opinion, as seen in your June No., page 257, and again in your remarks on the subject in the April No., p. 160: "We hope to live long enough to see that eternally vexed question of Wheat vs. Chess settled conclusively; but we do not expect to unless we eclipse Methusaleh." The long vexed question is settled. Here is the proof, which I take from the Le Roy Gazette, Genesee Co., N. Y.:

Pavilion, Aug. 1, 1856.

C. B. Thompson, Esq.,

Will wheat turn to chess? Perhaps wheat and chess will grow on the same stalk. Mr. Simon Burnham found, and now has in his possession a head of wheat, on which is a well-defined stalk of chess. The chess stalk comes out about one-third the way from the bottom of the head and contains eleven complete grains of chess. I advance no theory—make no comments—simply state the facts. T——.

I think the person who promised to hatch a Shanghai chick from a crow's egg when wheat would produce chess, had better commence the operation.

A. Subscriber.

AGRICULTURAL EDUCATION IN THE WEST.

The Ohio Agricultural College is permanently established at Cleveland, and its course of instruction embraces whatever relates to animals, vegetables, land or labor. Chemistry, comparative anatomy and physiology, with special reference to feeding and breeding of stock; geology, and mineralogy; botany, descriptive and physiological; natural philosophy; agricultural mechanics; farm implements; meteorology; elements of engineering and land surveying; rural architecture; landscape gardening; draining and farm book-keeping; political economy; history of agriculture, and general principle of laws relating to contracts, and especially to the acquisition, possession and alienation of real estate. A Commercial and Agricultural College has also been opened in the Hall of the Mechanics' Institute at Chicago.

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SHORT HORNED COW—"QUINCE."

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STOCK REGISTER.

SHORT HORNED COW—"QUINCE."

This splendid animal, represented in the opposite cut, is the property of the Ohio Farming and Stock Breeding Company, intended for the Company's farm in Butler County, Iowa.

Red and white; bred by Jas. Dun, purchased of R. G. Dun, of Madison Co., Ohio; calved May, 1853; got by Prince Albert, 854—dam, young Priscilla, by White Comet, 1093; gr. dam, Pricilla, by Grätz, 11,542; gr. gr. dam, Young Caroline, by imported Symmetry, 5,482; gr. gr. gr. dam, imported Caroline, by Dashwood, 3,566; gr. gr. gr. gr. dam, Fanny, by Stockstry; gr. gr. gr. gr. gr. dam by Senaton, 1,427; gr. gr. gr. gr. gr. gr. dam, by Whitefoot; gr. gr. gr. gr. gr. gr. gr. dam, Rosina, by Aid-de-camp, 722.

PEDIGREE OF PRINCE ALBERT.

Calved April 15, 1850; got by Shelby, 962; dam, White Rose, by imported Iragan, 1042; gr. dam, Duchess, by imported Lord Althorp, 659; 2d gr. dam, Victoria, (begotten in England,) by Ossodly: 3d gr. dam, imported Princess, by Edmund, 1,954; 4th gr. dam, Selina, by Grazier, 1085; 5th gr. dam, Favorite, by Northampton, 2,830.

Quince has been bred to, and is about to calve, to imported Colonel, 850, got by Lansdowne, 9,277, dam, Nelly, by Prince Edward, 6,334, &c., &c., vide English Herd Book.

The Ohio Farming and Stock Breeding Company, above referred to, is an association of gentlemen in Ohio, who have stood prominent as breeders of fine animals, and farmers of the first class, both for efficiency and taste, for some years past. They have purchased a large tract of the rich land of Iowa, and under the superintendence of such men as Dr. Sprague, Secretary of the Ohio State Board of Agriculture, and others of kindred ability, they are fitting it up into a thorough-going scientific and systematic farm, and stocking it with the choicest animals of our own and other countries.

Under such favorable auspices, we hardly see how it can fail to pay them a fair remuneration for their outlays, and to be of immense benefit to the State in which their operations are located, as well as to the whole West. Our only regret is, that Wisconsin had not been the chosen field of their labors, and we regret it the more, for the reason that there seems so little spirit among our more wealthy citizens for such highly creditable and useful enterprises. As yet, we don't know of an effort for anything of the kind in our State, worthy of mentioning —or above an individual two-penny enterprise. The same thing cannot be said of Michigan, Illinois, or Iowa. How long shall it be said of Wisconsin? and whose fault is it? Is it because the love of speculation, and inordinate per cents. and profits, among our wealthy men close their eyes to all considerations of permanent utility, and healthy progress, in actual, sound State growth and wealth? These are matters worthy of consideration and reflection, as laying at the foundation of our greatness as a State.

SPANISH MERINO SHEEP.

The Merino, though the native of a warm climate, becomes readily inured to the greatest extremes of cold, flourishing as far north as Sweden, without degenerating in fleece or form. It is a patient, docile animal, bearing much confinement without injury to health, and it possesses none of that peculiar "voraciousness of appetite," ascribed to it by English writers. Accurately conducted experiments have shown that it consumes a little over two pounds of hay per diem, in winter; the Leicester consumes from three and a half to four; and the common wooled American sheep would not probably fall short of three. The mutton of the Merino, in spite of the prejudice which exists on the subject, is short grained and of good flavor, when killed at a proper age, and weighs from ten to fourteen pounds to the quarter. It is remarkable for its longevity, retaining its teeth and continuing to breed two or three years longer than the common sheep, and at least half a dozen years longer than the improved English breeds; but it should be remarked in connection with this fact, that it is correspondingly slow in arriving at maturity. It does not attain its full growth before three years old, and the ewes in the best managed flocks, are rarely permitted to breed before they reach that age.

The Merino is a far better breeder than any other fine-wooled sheep, and my experience goes to show that its lambs, when newly dropped, are hardier than the Bakewell, and equally so with the high bred South Down. The ewe is not so good a nurse,

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however, as the latter, and will not usually do full justice to more than one lamb. Eighty or ninety per cent. is about the ordinary number of lambs usually reared, tho' it often reaches one hundred per cent. in carefully managed or small flocks.

We have already adverted to the cross between the Merino and the native sheep. On the introduction of the Saxon family of the Merinos, they were universally engrafted on the parent stock, and the cross was continued until the Spanish blood was nearly bred out. When the admixture took place with judiciously selected Saxons, it resulted not unfavorably for certain purposes. But unfortunately, these instances of judicious crossing were rare. Our country was flooded by eager speculators, with the feeblest and least hardy Merinos of Germany. Fineness of wool during the period of this strange excitement, was made the only test of excellence, no matter how scanty its quantity, no matter how diminutive or miserable the carcass. Governed by such views, the holders of most of our Merino flocks purchased these over-delicate Saxons, and the consequence was as might have been foreseen—their flocks were ruined.

[Sheep Husbandry.

ROYAL AGRICULTURAL SHOW OF ENGLAND—HIGH PRICE OF CATTLE, &c.

The following interesting letter, from Mr. Alexander, will explain itself:

LONDON, July 21st, 1856.

EDITOR OHIO FARMER—*Dear Sir:* Having left home for this country about the beginning of this month, with the intention of spending some three weeks in looking about me, I had scarcely expected to see anything, (so soon at least,) worth writing about. I was, however, most fortunate, in being in time for the Show of the Royal Agricultural Society, of England, which was held this year at Chelmsford, about 30 miles from London, which gave me an opportunity of seeing, in one day, most, if not all, the fine stock, in the cattle way, *now* to be found in England. In the beginning, I may say, that I consider the show of Shorthorns a very inferior one, and if you will come over to the *first Fair of the Kentucky State Agricultural Society*, to be held at Paris, this year, I will guarantee, (should matters be arranged in a manner to give satisfaction to the public, and the breeders generally,) a much finer exhibition of this sort of stock.

You may think me presumptuous in thus early predicting success to our Society, but if we fail, it will not be for want of the means of success, so far as Shorthorns are concerned, as at present, fine cattle of this breed are far more numerous with us, than in this country.

The cattle were divided into three classes: 1st. Those calved previous to July 1st, 1854. 2d. Those calved between July 1st, 1854, and July 1st, 1855. 3d. Those calved after July 1st, 1855, and over 6 months old.

Mr. Towneley's Bull—Master Butterfly—as upon former occasions, was first here, taking the prize, value thirty pounds, equal to $150; Mr. Ambler's Grand Turk, being 2d. As both these were at the Carlisle show, last year, I need say no more about them; as for the other aged bulls, the less said the better.

Mr. Fawkes, who took 2d prize last year, with his bull John O'Groat, nearly 2 years old, (sold after the show for 200 guineas,) took 1st prize this year, with his young bull, General Bosquet, a nice looking young animal, but not quite so fine to the touch as I could wish. Mr. Barrowby, of Dishforth, took 2d prize in this class; calf only tolerable.

Mr. Ambler took the prize for the best bull calf over 6 and under 12 months old, with his calf Napoleon, got by Baron Warlaby, a good calf, but a little defective about the rump.

The cows were also divided into three classes, as above. Mr. Towneley won the 1st, and 2d prizes, with his cows Roan Duches 2d, and Blanche 0th, after which, in this class, there was nothing worth looking at. Among the 2d class, or 2 year olds, Mr. Towneley's Victoria was 1st, and Mr. Stratton's Marcia 3d was 2d; these two were very tolerable heifers; the others in this class were inferior.

Among the yearlings, Mr. Booth's "Queen of the May," was 1st; a remarkably nice heifer, by Crown Prince; dam, by Harbinger; the 2d prize was given to Mr. Greenfell's Battine, by the Duke of Richmond; a nice heifer, but rather hard, or, as we should say in Kentucky, a bad handler.

The number of Shorthorns exhibited this year, at the Royal Society's Show, was 78, which I believe to be considerably less than usual, and if we look at the shape and quality of the stock, generally, there is a most decided falling off in this show as compared to those of former years. But how can it be otherwise? Exhausted by the constant demand first from America, then from France and the continent of Europe, and more recently from Australia, the Shorthorns have, within the last four years, diminished most wonderfully in numbers. And as most people who come here for stock, desire to get the best, the number of good ones left is very small, compared to the whole number.

So great is the demand from France, and Australia, just now, that prices which were high last year, are now fifty per cent. higher.

I bought then the 1st prize cow of the

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Royal Society's Show, at Gloucester, for 200 guineas, and the 1st prize yearling heifer, at last year's show, at Carlisle, for the same price; now they ask 500 guineas for the 1st prize cow, and 300 or 400 guineas for the 2d, and for the rest in proportion, if they can be had at all.

You may think cows high at these prices, but bulls are higher; Master Butterfly has been sold to go to Australia for the unprecedented price for this country of 1200 guineas, equal to $6,000. Mr. Ambler sold a young bull for 200 guineas, and could, immediately after have got 50 guineas more. Mr. Fawkes sold a yearling for 120 guineas, and a Mr. Bate one for the same price, both quite second rate; and Mr. Towneley sold a calf by Master Butterfly, which I consider quite 3d rate, for 300 guineas, *but blood will tell.*

In conclusion, I must tell you, that other stock are also selling high, as for instance, 150 guineas for a South Down ram, sold to go to France, and other things of the like. Could we get such prices in the West, we should soon be remunerated for our outlay in our purchases here, but till foreigners become buyers which they might possibly do now with advantage, we cannot expect it.

I expect to be at home at the time fixed for my sale, viz: 3d of September, when I hope you can come and see me. The sale will go on whether I am at home or not, and my brother will be glad to see you, in case any accident should prevent my returning in time.

Should I find anything worth writing about, in looking at things here, I will write you again. Yours truly,

R AITCHESON ALEXANDER.

[Ohio Farmer.

RAILROADS AND AGRICULTURAL EXHIBITIONS.

In some States of the Union, Railroad Companies are very liberal during the season of Agricultural exhibitions, carrying visitors for half price, and live stock, farm products, agricultural machinery, and other things intended to be placed regularly upon show at the Fairs, altogether free of charge. This, though praise-worthy on their part, we have never doubted was even a greater advantage to them than to the great interest which it is their desire thus to promote.

In some sections, however, where commercial perceptions have not been quickened by much experience, or where a pre-determined dullness rules because it has made up its mind to do so, it is hard to convince the railroad companies that a liberal policy towards the several classes of persons interested in getting up agricultural fairs, and exhibiting live stock, field crops, improved machinery, domestic manufactures, etc., before the thousands who always attend such collections of the rural population, is a just and wise policy towards themselves. Yet we have no more doubt of this, than we have of the existence of Agricultural Societies.

No other State in the West has so many railroads as Ohio, and perhaps the experience of no other has been so great with Agricultural Fairs, and all the circumstances that attend them. The practice in that State would therefore seem to be one upon which her sister States might rely with much confidence, in reference to the same matters. Wishing to understand exactly what was customary there, we a short time ago addressed a letter to a prominent officer of the State Board of Agriculture of Ohio, making particular inquiry upon the subject. The following is the main body of his reply:

"The success of your State Fairs, you may depend, will hang upon the contingency of carrying stock and other articles for exhibition *free of charge.* The simple fact is, *they cannot be kept up without free transport*—that is, free transport of things intended for exhibition, and which shall not be sold at the Fairs, or on their way to or from the same.

"Our railroads make large profits by carrying people at half fare—some companies having realized $10,000 over and above the usual profits in the same length of time. As near as we can learn, the extra profits on leading roads have ranged from $6,000 to $10,000 during *Fair Week.* The benefits are mutual between the railroad companies and the farming interests; but in so far as direct pecuniary gain is concerned, the former have the largest share of the advantage.

"For 1855, the railroad companies here attempted to institute a new order of things, by resolving to charge half freight upon stock and articles; but at the eleventh hour, *discovering that no Fair would be held,* they came forward in special convention, and declared that they *could not afford* to part company with the customary annual gathering—promptly restoring the necessary regulations, and acting that year with greater liberality than ever before—all their employees seconding their efforts, at the time of the Fair, and thus doing away with the usual prejudice against railroads, and against traveling to large gatherings.

"This," concludes the writer, "is a very gratifying state of things, and will do the railroad companies and our enterprise great good during the coming Fair."

The true policy of both parties, we have not a doubt, is that which is pursued in Ohio. It is liberal to the farming and manufacturing classes, and, since it *pays* better than the opposite policy, of course just to the railroad companies. [Western Farm Journal.

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HORTICULTURE.

FALL PLANTING.

We are led to believe, after a full consideration of all the *pros* and *cons* on the subject, that tree planting may be as safely done in autumn as in the spring, in all common cases—especially if done early enough to enable a tree or shrub to become well and naturally imbedded in the soil, by the action of rain and time. But in all cases of fall planting, we deem it indispensably essential to raise a mound around the tree, from six to twelve inches in hight, and from three to four feet broad; and in making this mound, care must be observed, not to take the earth so near the tree as to leave a low circle around it, to allow the surface water to settle around the roots, and freeze or drown out the tree. We believe this is the most common cause of failure in fall planting.

As a specific direction, we would say, plant as early as the middle of October; and leave the ground around the tree level, as in spring planting, for two or three weeks, until the rains usually occurring at that season of the year, have fallen upon and settled the ground; then go before it freezes, and put up the mound for winter. Be sure and not fail to do this, because you leave it in the first instance. To omit this mounding precaution, might very possibly cost you half your trees. A liberal mulching of long horse manure, all over the mound for four or five feet in diameter, would also be a great additional protection, and render it next to impossible for even tender roots to be killed. Next, as a protection against rabbits and cold weather, it is extremely well to wind the body closely with a hay or straw rope. These ropes may be made with great rapidity, by a boy even, after a little practice—by taking a common cheap brace to twist them with. An active hand will make enough in this way, and wind it all into balls ready for use, for a whole orchard in a short time. But in this treatment, caution must be observed to have and keep an orchard enclosed, entirely safe from the intrusion of all browsing animals; as the hay, or straw, would only be a certain bribe or bait to ensure the destruction of the trees.

Then again, in mulching, if the straw is too dry or abundant, it will make a harbor for mice, who will bark and spoil the tree before spring. All these matters must be properly thought of and heeded; or the money had better not be invested in the tree in the outset. Here we cannot omit to repeat what we have often before said, that unless men make up their minds to select and plant trees *well*, and then and thereafter, to take such care of them as they ought, they had better let them alone in the outset, and save all the expense and mortification of loss and failure.

The main and only reason why we recommend fall planting, with its obviously additional labor, is to economise in time, as every one who has had any experience knows how short the spring planting season is, and how much we all fail of accomplishing what we intend, during its brief period. We intend to plant extensively this fall, of both fruit and ornamental trees, and if we materially fail of the success which we hope and expect, we will duly apprise our readers of the fact. As bearing on the same subject, we subjoin the following articles from the Horticulturist:

"Planting Trees.—Those who intend to plant in the fall should immediately attend both to the preparation of the ground and selecting the trees. With regard to the latter, a better estimate can be made of the general habit and health of a plant before the fall of the leaves. It may be necessary to caution beginners against the prevailing error of selecting the *largest* trees. Medium sized trees come up with better roots, are easier handled, less liable to casualties in transportation, and grow faster than those that have been drawn up tall, weak, and unshapely in nursery rows. Old trees have strong roots, and these must necessarily be cut in removing. The tops must then be pruned down, to correspond with this mutilation, in order to secure a healthy start. So that there is nothing gained in the way of

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size. Even should they live, it is only an eking out a miserable existence for two or three years; meanwhile the smaller tree far exceeds it both in health and hight.

"The question as to whether autumn or spring planting is most successful, has often been discussed. The arguments favoring autumn planting are based upon the well-known fact that the roots and branches may be separately excited to growth. This is well exemplified in the rooting of slips or cuttings. To favor root formation the cuttings are placed in soil kept warmer than the surrounding atmosphere. In the fall the soil is warmer than the air; the formation of roots proceeds while the branches are dormant; when spring arrives, the balance of the tree being in a great measure restored, growth commences vigorously, and the plant becomes established and able to bear up against summer aridity.

"But to insure these good results, planting should be proceeded with *immediately after the leaves have fallen;* if delayed beyond October success will be less certain.

"Holes should be made six or eight feet in diameter and fourteen to eighteen inches deep. In clayey subsoils, breadth should be considered of more importance than depth. A portion of well pulverized soil should be in readiness when planting season arrives. It is poor economy to pay a couple of dollars for a tree and then begrudge a shilling for planting it."

For the Farmer.

THE PEAR GRAFTED ON APPLE STOCK.

MESSRS. EDITORS—In answer to the question, "Can the pear be successfully grafted on apple seedlings?" I would say that I have seen several trees in Ohio that were grown on apple tree stocks, and were good growers and first rate bearers. I have a tree here that I grafted on an apple stock, in the spring of 1851, that has grown well. In the spring of 1855 it blossomed quite full, and I think it would have borne pears this year if the past winter had been an ordinary one; but as it was, my tree came out minus fruit spurs and small branches. It has however put out new shoots, and is making fair progress in forming a new head. I have a pear tree growing on a wild thorn, that was entirely uninjured by the winter. It has not grown as fast as the other, as I have not pruned nor taken much care of it. They are of the Barlett variety.

I wish to suggest to fruit growers who have different varieties of apple trees, to note the varieties that have suffered the least from the severity of the past winter. I have an orchard of about one hundred trees, and as many as twenty-five varieties, some of which are all entirely killed. I had 3 trees of Early Sweet Boughs, all killed; 3 Roxbury Russetts all killed; 3 English Russetts, all killed; 4 Tallman Sweeting, all injured; 1 Green Sweeting, injured; 3 Seek-no-furthers, all uninjured; 1 each of Vandervere, Swaar, Northern Spy, Yellow Bellflower and Black Gillflower, uninjured. Rambo, Fall Pippin, Rhode Island Greening, Baldwin, Esopus, Spitzenburg, Bellmont, Summer Rose and Domino are not killed; but they are all badly damaged—some of them so much that I consider them worthless. I have some seedling trees none of which are much injured. I think it would be a good plan to raise seedling trees, and we shall get *some* good apples; and such as are worthless can be changed by top grafting. Good ones can be let alone; and the first rate ones can be disseminated by grafting from them, thereby increasing hardy varieties. Last year I had about twenty-five bushels of apples; this year there will be something more than half as many.

Peaches might as well be left out of the list, unless some men are willing to bestow a great deal of labor on them. I have experimented with them some, and have satisfied myself of the amount of protection they need. I have a small tree that is very full of peaches this year, although most of my peach trees are quite dead. DOMINOR.

RUBICON, Sept 8, 1856.

We wish those who have lost trees during the past severely testing year, would, in conformity with the suggestion of our friend, forward to us lists of the kinds that have died most, that we may be able to make up the safest possible lists for purchase and planting hereafter. If people will take pains to do this, the facts learned from it will be highly important. EDS.

STRAWBERRIES.—The Cincinnati Valley Farmer rejoices greatly over the strawberry business of this season, and says, in June: "Mr. Culbertson, alone, is now bringing into market daily one hundred bushels of strawberries." [Horticulturist.

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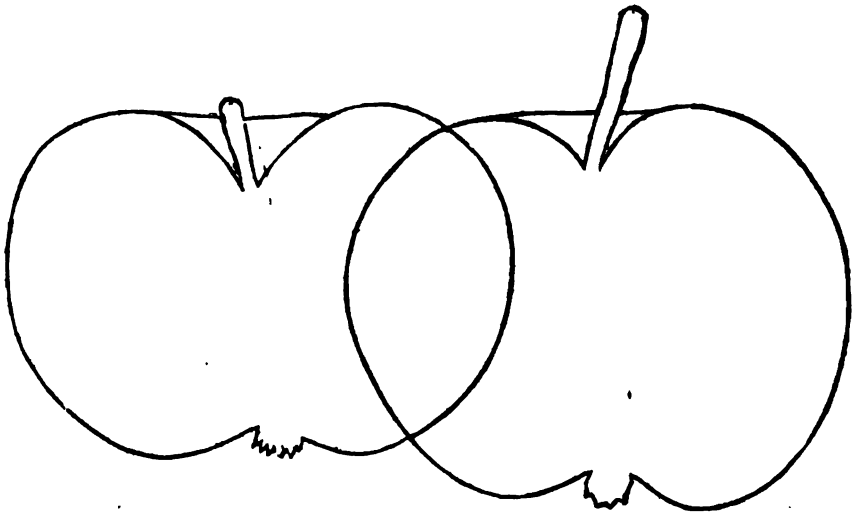
BUFFINGTON'S EARLY. GOLDEN SWEET.



APPLES—TWO CHOICE VARIETIES.

BUFFINGTON'S EARLY.

This is a very pleasant apple, ripe from the middle to the last of August; medium size, oblate, slightly ribbed; skin smooth, pale yellowish white with blush in the sun. Flesh very tender, delicate sub-acid. Succeeding the Yellow Harvest apple, and quite as good.

Tree rather slow grower, with open head; said to be but moderately productive. Two trees six years planted fruited this summer for the first time, bearing heavy crops for trees of their size. They endured the past severe winter uninjured.

For the Farmer.

BRINKLE'S ORANGE RASPBERRY.

Of several varieties of Raspberries fruited this summer, none have pleased me better than the "Orange." This is one of Dr. Brinkle's seedlings, beautiful to look at, and of excellent flavor. It is as large as the "Franconia," but more conical, orange color-sometimes shaded with rose, of a delicious pine-apple flavor. The canes are light colored, vigorous, and exceedingly productive, continuing in bearing about three weeks. It is hardy at Philadelphia, where it originated, but will require protection here.

A. G. HANFORD.

WAUKESHA, Wis.

GOLDEN SWEET.

A fine sweet apple, ripe last of August; medium to large size; rounded to conical shape. Pale yellow, always fair, as a rich agreeable sweet. Tree strong, irregular grower while young; spreading top, very productive; excellent for baking.

TOMATOES.

TOMATOES should claim a large share of attention this season. They are a most healthy vegetable, and an excellent substitute for fruit in seasons of scarcity like the present. They are so cheaply and abundantly raised, and so easily preserved, that every family should secure a large supply of them.

There are a variety of preserving cans now in use, any of which, that can be closed air tight, will answer the purpose, and when properly arranged for the business, several hundred cans can be put up in a day by two persons. The only requisites to be observed are—to scald the fruit in a large kettle until the air is entirely expelled from the body of it; place the cans in a large flat pan of boiling water and fill immediately with the hot fruit, and when brought again to the boiling point, close down the caps so as to perfectly exclude the air, and set the can away in a cool, dry place in the cellar.

[Valley Farmer.

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LONGEVITY OF THE PEAR-TREE.

We found growing in an orchard in West Flanders a variety of pear under the name of Poire de Froment, (Wheat Pear,) doubtless the descendant of a variety known among the Romans as the Pyrus hordeana, the fruit of which ripened about the same time as barley. This majestic tree has two upright, parallel stems, is 12 feet in circumference, and 45 feet high. In 1854 it produced 15 sacks of pears. The bark is deeply rent in many places, indicating that the tree is of great age. The farmer, himself 85 years old, told me that his grandfather, who died 60 years ago at the age of 92, had frequently told him that in his early days he had measured it, and that it was then 60 feet in circumference. It is supposed that this tree is about 250 years old. It is still far from being worn out, having produced in 1854 15 sacks, as above stated, and in 1855 it yielded 6 sacks, and it is again pushing terminal shoots 6 inches long. Of another variety known by the name of Mansuette, an excellent kitchen pear, (the Mansuette of Duhamel is a table pear,) there is a tree which is not less than 200 years old, and it is as productive as the one already mentioned. Its branches, loaded with fruit, hang down like those of a weeping willow. These two trees, as well as several other large trees, presented the appearance of having been grafted at two, three, and four feet high. To keep them in good condition, all the care which they receive merely consists in pruning off every two or three years useless shoots tending to cause confusion, in spreading well decomposed manure over the ground before winter, and in applying every year at that season two or three casks of liquid night soil, without disturbing the turf over the roots, excepting perhaps for two or three feet round the trunk.

These two instances, and others that might be given, prove that the pear-tree, when its constitution is strong and hardy, can sustain for a long period the severities of our climates, and that it can, in a good soil, and with careful treatment, attain the age of 300 years. It is in the conditions of soil already pointed out, and more especially in ground sloping to the west, that this result may be obtained. There is no doubt that among the modern varieties which have been obtained in the present century by the system of Van Mons, there are several sorts of excellent dessert pears, ripening in long succession, the trees of which would live as long as the Poire de Froment, or the Mansuette. [Gardener's Chronicle, (London).

THE water that flows from a spring does not congeal in winter. So those sentiments of friendship which flow from the heart cannot be frozen in adversity.

A CURIOUS QUESTION.

It is a singular illustration of the inexactness of agricultural knowledge, that the question how many seeds there are in the pound of our commonly cultivated field plants, should still remain to be answered. It is plain that the answer will not necessarily affect farm practice; for the quantity of seed which it is proper to sow per acre, is a matter to be determined by experience, not by argument apart from trial; and yet surely it is most desirable to compare the number of seeds we ordinarily sow with that of the plants we raise. If in ordinary practice, 1,200,000 seeds of wheat are sown on every 40,000 superficial feet, or what is more extraordinary, fifteen to eighteen million seeds of flax are scattered on the same extent, about three to every inch of land, it is surely well to let the farmer know it. He knows very well he does not raise so many plants as this—and struck, as he must be, by the enormous disproportion between the means he uses and the results he gets, he will inquire into its causes.

The turnip seed employed per acre, numbers from 600,000 to 1,009,000, according to the kind and quantity adopted; this, if the rows are two feet apart, is two or three dozen seeds per foot of row, where a single plant alone is to be grown. No doubt nothing like so many generally come up, but then there is a great destruction by the hoe, which will explain much of the discrepancy in this case. What, however, becomes of the 18,000,000 seeds of flax which are commonly—of the 6,000,000 seeds of oats which are sometimes sown per acre? There is no destruction by the hoe in either instance here. A single ear of oats may contain 100 grains—a single plant will generally include half a dozen ears, but if 6,000,000 should yield as much as this implies, they would produce 100 loads of grain. Instead of 600 seeds apiece, they yield but half a dozen each to produce an ordinary crop of oats. It is plain that five-sixths of the seed, or of the plants that they produce, are killed in the cultivation of the crop; and the proportion is vastly greater than this in the case of other plants. What is the ordinary seeding of the clover crop? Eight pounds of red clover, four of white clover, and four of trefoil may be sown—that is at least 6,000,000 seeds per acre—a seed on every inch of land—but instead of 144 are there generally half a dozen plants on every square foot of the clover field?

There are about 25,000 seeds of sainfoin in a pound of 'rough' seed, as it is called, and it weighs some 20 pounds per bushel; four bushels in an ordinary seeding, and they contain 2,000,000 seeds, or 50 per square foot of land. This is the number, too, of

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seeds in an ordinary seeding of vetches. It is manifest that in both these cases there is an enormous destruction either of young plants or seed; and these are the two great divisions under which the causes of this anomaly must be classed: faults of seed and sowing, and faults of cultivation. We are enabled by the assistance of Messrs. Rendle, of Plymouth, to lay before them the following answers to the question—how many seeds to the pound?

Name.	No. of seeds per lb.	No. of lbs. per bush.
Wheat	10,500	58 to 64
Barley	15,400	48 to 56
Oats	20,000	38 to 42
Rye	28,000	56 to 60
Canary Grass	54,000	
Buckwheat	25,000	48 to 50
Turnip, (Rendle's Swede,)	155,000	50 to 56
" (Cornish Holdfast,)	239,000	"
" (Orange Jelly,)	235,000	"
Cabbage (Scotch Drumhead,)	128,000	56
" (Drumhead Sayvoy,)	117,000	50 to 56
Clover (Red,)	249,600	60
" (White)	686,400	59 to 62
Rye Grass, (Perennial,)	314,000	20 to 28
" (Italian,)	272,000	18 to 18
Sweet Vernal Grass,	923,200	8

[Scotch Paper.

DESTROYING PERNICIOUS INSECTS.

T. Glover, the distinguished entomologist connected with the Agricultural Department of the Patent Office, has lately furnished the National Agricultural Society with a most interesting essay on destructive insects and birds; and he enjoins our farmers to study their habits. He says;

"A close study of the habits and transformations of any one of the pernicious insects, (ball worm, wheat midge, caterpillar, &c.,) by the practical and intelligent farmer, would prove not only a source of great pleasure, as leading him to a keener sense of the beauteous and wonderful works of nature, as exemplified in the singular transformations insects undergo, before they assume the perfect fly state, but also a source of great profit, as by experimenting upon them in all the stages of their existence, he might perchance discover some practical method by which their extermination could be effected. Indeed, it is absolutely necessary that a farmer should be able to recognize the insects that destroy his crops, in all their various and wonderful transformations, before any effectual remedy can be applied; as in one stage of their life they may be suffered to live and enjoy themselves, nay, even sometimes be protected, while in another stage we persecute and destroy them by every means in our power. For example, the beautiful butterfly of the *papelio asterais*. Any humane and kind-hearted farmer, unversed in entomology, who should see his children chasing and killing the beautiful black and yellow spotted butterfly that was flitting joyously over his vegetable garden, in the spring or early summer,, apparently leading a life of mere harmless pleasure, would, no doubt, reprove them for wantonly destroying such a pretty, harmless insect; and yet, if the truth were known, this pretty and much to be pitied insect is the parent of all those nauseous smelling green and black spotted worms that later in the season destroy his parsley, celery parsnips and carrots. Yet by merely crushing the parent fly at one blow early in the season, before it has deposited its eggs, he would be spared the vexation of either seeing his plants devoured and seed destroyed, or having the disagreeable task of picking off, one by one, some hundreds of caterpillars later in the season. This fact will be more apparent when I state how incredibly fast some insects multiply, especially in the warmer climate of the south, where there is little frost to destroy vegetable life, and there are several generations in one season. Dr. John Gamble, of Tallahasse, Fla., assisted by myself, dissected a female ball-worm moth or miller (an insect which in the caterpillar state is most destructive to cotton,) and we discovered a mass of eggs, which when counted, amounted, at the least calculation, to five hundred, duly hatched, for the first generation, say one-half males, the rest females; the second generation, if undisturbed, would amount to 125,000, and the third be almost incalculable.

"Now, these mother flies are not very numerous early in the season, owing to the birds devouring them, the rigor of winter, and various other accidental causes, and if practical means were found to destroy them as early in the spring as possible, the immense ravages of the third and fourth generations might be prevented. In one female (œceticus) case or hangworm, so destructive to the shade trees, I counted nearly eight hundred eggs, although the specimen was but small. Now were all these cases taken from every infected tree in the winter, when they can most easily be seen, owing to the fall of the leaf, and then immediately burned, the trees would be comparatively free the next season; and by following this plan for one or two years more, the work growing gradually less and less, the insect might finally be exterminated, inasmuch as the female never leaves her case, but forms her nest of eggs inside; and yet these noxious pests are suffered year by year to increase, when so little trouble would destroy them. Other insects again have other habits, which, if fully known, would likewise lead to their destruction."

POLITENESS is the offspring of generosity and modesty. It belongs to the frank heart and not to the studied head.

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For the Farmer.

KEEP OFF THE RABBITS.

Eds. Farmer—Trees of all kinds have their enemies, one of the greatest of which, was the extreme cold of last winter, as thousands have perished in Wisconsin by the wintry wand; especially those imported from the Eastern States. It is a difficult matter to protect fruit trees from the winter's chilling blasts, or from the summer's drouth; but from the nocturnal depredations of the rabbit it can be done. I have used the precautionary measure for twelve years in Wisconsin, with success, except in one case, which was at the beginning of last winter, after the first fall of snow; the downy rogues took advantage of my neglect. They nibbled some of the larger trees, and cut the leading and lateral shoots from at least two thousand of one year old apple grafts. They also exercised themselves on the Plum, Pear, &c. I set to work immediately after finding there were too many hungry visitors, and used the very simple composition, which put an end to their depredations. The articles used are merely flour of sulphur with any kind of common oil, mixed well together, so as to form a thick paint. A paint brush is used the same as for common painting. The method adopted with me is merely to touch the fence about every five or six feet the length of it with the brush, about one foot from the ground. The number sticks are also painted in the nursery rows. The invaders have so great a dislike for sulphur, that in its presence they will have no communication with you or your trees.

Farmers setting out orchards would save their fruit trees from rabbits, by using laths sawn in two and pointed at one end, inserted into the ground near each tree, and painted with the composition. They should be thus placed about the end of September, or the beginning of October, and painted afresh in January.

If they are troublesome after the above is properly done, they must be a different species of rabbit from that I am acquainted with. This will effectually check their depredations. Yours truly,

John Hand.

Madison Nursery, Sept. 19, '56.

Horticulture, as a pursuit, is not only interesting, but refining to the mind.

SEEDING OF WEEDS.

One of the most fertile sources of the continuation of weeds is that of constantly allowing them to seed on the land. Now, the enormous increase which may result from seeding may be gathered from the following table of observations made upon a few of their common species:

Common Name.	Number of Flowers.		Number of Seeds each Flower may bear.		Number of Seeds on a single Plant.
Groundsel	130	by	50	—	6,500
Chickweed	50	by	10	—	500
Corn Cockle	7	by	370	—	2,590
Campion	25	by	137	—	25,137
Red Poppy	100	by	500	—	50,000
Charlock	400	by	10	—	4,000
Black Mustard	200	by	6	—	1,200
Corn Bedstraw	100	by	2	—	200
Clivers	550	by	2	—	1,100
Corn Sow Thistle	100	by	199	—	19,000
Musk Thistle	25	by	150	—	3,750
Fool's Parsley	300	by	2	—	600
Tare	60	by	3	—	180
Wild Carrot	600	by	2	—	1,200
Wild Parsnip	600	by	2	—	1,200

Now, it is not likely that each individual plant would always perfect the quantities of seeds above tabulated; but the list gives a pretty accurate notion of the numerous seeds which might be perfected under circumstances favorable to their development, and from it will at once be gathered the important practical fact that, allowing for the casualties to which seeds are constantly liable, yet enough would be left, where seeding is allowed but for a single year, to give trouble for many years after. It cannot be too earnestly urged that weeds be destroyed before their seeds are ripe.

[Life Illustrated.

Advice to Young Farmers.—Allow me to say, to young farmers especially; let us be studious and inquisitive, as well as laborious—let us be simple and frugal in our habits; avoid useless expenditures; leave fine dress, and fast horses, and showy dwellings to those who really need such things to recommend them. Let us ever remember that for health and substantial wealth, for rare opportunities, for self-improvement, for long life and real independence, farming is the best business in the world. [Ex.

Fences in Ohio.—There are 18,000,000 acres of land in Ohio, enclosed with 45,000 miles of fences, at a prime cost of $115,000,000, and at a yearly expense for repairs, &c., of $7,680,000—of which sum Gen. Worthington calculates that at least one-third, or $2,560,000 might be saved by laws prohibiting domestic animals, and especially hogs and sheep, from running at large.

Beware how you address yourself in anger to any one. An angry word is like a letter put into the post—once dropped, it is impossible to recall it.

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CORRESPONDENCE OF THE FARMER.

WAUKESHA, Sept. 8, 1856.

DEAR SIRS—I returned on Saturday from a three weeks' trip up the Mississippi, thro' the counties of Pierce and St. Croix, Wis., and thence to Stillwater, St. Paul, St. Anthony, Minneapolis, and back home, and now, after just examining your September No., (the best number of the FARMER ever issued,) I wish to give you a few notes of my observation.

The largest and best field of Dent Corn I have seen this season, I saw four miles south of Stillwater, in Minnesota. The corn crop, both Dent and Yellow Flint, is better in Minnesota and Northern Wisconsin, than in Iowa, Northern Illinois, or Southern Wisconsin.

The other crops, of wheat, oats, potatoes, tobacco, melons, beans, onions, &c., are equal, and in many locations superior, to the same productions in this latitude.

I saw at Minneapolis a mammoth bunch of *mammoth grapes*, a native variety, and of delicious flavor. I shall know more of that grape vine when I go up in November.

I wish you could make it in your way to go up and attend some of the Agricultural Conventions this fall. It would pay you, and gratify your reading farmer friends to see the result of your visit in the FARMER.

Yours truly, T. D. PLUMB.

We wish our friend PLUMB would more frequently favor us, and the readers of the FARMER, with notes and observations, on the various and widely extended districts thro' which he is constantly traveling. His discriminating judgment, and fair unbiased mind, would usually lead him to the right conclusions on all he saw, and make his communications instructive and valuable to that numerous class of readers who are contemplating changes of location, or who have a curiosity to compare the notes of different localities.

Mr. P.'s observations only go to prove what all our northwestern neighbors claim, and what we are much inclined to believe; and that is, that Northwestern Wisconsin and Minnesota are just as good regions in all respects, for settlement and farming, as the regions south of them. EDS.

AGRICULTURAL EDUCATION.

IOWA CITY, Sept. 6, 1856.

EDS. FARMER, GENTLEMEN—Will you please inform me where is the best Agricultural School, where a young man 18 years old, wishing to be a scientific farmer, can attend with the prospect of the greatest benefit, and much oblige

Yours respectfully,
D. EDSON SMITH.

See notice of Agricultural Colleges at Cleveland, Ohio, and Chicago, Illinois, on page 447 of this number. There is not in Wisconsin, Iowa, or Minnesota, as we are aware, a single institution or school, in which its principles or practice is taught. Is not this a singular fact? Every other trade and profession is considered worthy of especial instruction; but Farming, by the mass, is considered so simple an operation as not to need any systematic or scientific training and many even scout the idea of an Agricultural paper, in which what little people do know, is told and circulated among the masses, deeming it so much sheer conceit and downright humbug. But a better day is dawning upon the free, enterprising States of the West, and we expect soon to see Agricultural and Manual Schools, as common and popular, and more so, than for the education of any other class of business men.

In conclusion, let us suppose all our young farmers in the West put through a certain course of study, and demonstration, calculated to learn them the right foundation principles of their profession; what amount of difference would it not make in the appearance and products of agriculture in our generation? Who can tell? EDS.

IMMIGRATION.—According to a table of immigration, covering eleven months, ending on the 30th of July, it appears that only 105,707 had arrived for settlement in the United States. Of these, 8,000 were destined for the New England States; 3,000 to the Slave States; 10,000 to Wisconsin, 39,948 for New York. The cash means of the whole were $5,398,369.54.

IT was a remark of Themistocles that he preferred marrying his daughter to a man who lacked wealth, rather than one who lacked sense. Had all fathers been of the same opinion, what a lot of fools the world would have been spared.

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For the Farmer.

WHEAT AND CHESS.

MESSRS. EDITORS—Not having received the July number of the Farmer, I thought I would drop you a line on the subject and have you send me one. They were moving the post-office about that time, and in the confusion gave it to somebody else, or lost it some other way, so that I did not receive it at the usual time.

I am somewhat amused to see what ingenuity some of your patrons manifest in their zeal to make wheat turn to chess. If they will show as much zeal in studying the nature and character of chess, they will ascertain that it would be as reasonable and possible to raise wool from a Berkshire pig, as to make wheat turn to chess. If they will examine their early sowed wheat in the fall, they will find that it has a soft, smooth, shining, bluish green appearance and feel, while the chess leaves are harsh and jagged, with a purplish color about the joints, that is entirely dissimilar to the wheat—as much so as the sheep and pig.

They have also overlooked the fact that flax has also a chess that grows with it that is as troublesome as the wheat chess. Query—Does that turn by winter-killing?

Yours truly, M. FINCH.

FT. ATKINSON, Wis., Aug. 25, '56.

INTEREST IN AGRICULTURE.

GENEVA, Wis., Sept. 7, 1856.

EDS. FARMER, GENTS:—Being somewhat interested in agriculture, and the improvement thereof, and believing the FARMER capable of producing much good, in the advancement of the science of agriculture and its kindred sister arts, and being a subscriber thereto, I entertain a great regard for its welfare although I am not a farmer myself now, being only a young day laborer ambitious to become one; therefore my reading for the past few years has been agriculture, and the FARMER being a cheap and instructive source from which to derive useful information, I have read every number as it has come to hand with great delight, it abounding in *solid facts*, not *shallow theories;* and I think that the farmer who thinks he cannot afford to pay the nominal sum of $1 per year for an instructive and entertaining agricultural paper, such as the FARMER surely is, must be blind to his own interests. But the truth must be known—they "know everything," (nothing,) and glory in it; *i. e.* most of them do. Some of them are awake and up and doing; and if a *farmer* succeeds in his avocation, an *earth scratcher* will say, "*he* is a *lucky man.*"

But I crave pardon, Messrs. Editors, for thus digressing from my business; for it will be deemed nothing but impudent for a lad yet in his 'teens to talk thus to some of the aforesaid wise men. But to my business: I would inquire if you could inform me through the medium of the FARMER of the whereabouts of the August number, as I have not received it at all as yet, and I cannot hardly do without it. The September number came to hand earlier than usual. The reason is seen in the contents, which abound as usual in all sorts of useful and entertaining knowledge. If you will please inform me through the Oct. No. of the price of single copies, you will confer a great favor, for I would not break my set for $5, as I wish to bind them. Pardon the length of my letter and this intrusion,

while I remain, yours &c.,

D. RUTENBER.

We would say to our young friend, that his communication is very acceptable; altho' we think it perhaps gives us rather more credit than we are entitled to. We are doubly well pleased to find boys and young men interested in agricultural matters, and agricultural journals. We do not consider that there has been anything like a beginning even of appreciation in these matters till within the present generation. When we go back to our own childhood, 25 to 30 years ago, in good *old* New England; we can hardly recollect even to have seen an improved agricultural implement or machine that would not now be laughed at. Many a day we have reaped in our father's fields, with the old fashioned sickle, side by side with a half dozen men, before the cradle came fairly into use. In fact, many of the Fathers of those days doubted whether the cradle was a real improvement on the sickle. Reapers had never been dreamed of then. The plows were made of wood, and covered with plats of iron, nailed on where they came most to wear. The hoes and axes

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were made at the blacksmith shop, and the brooms of Birch and Hemlock. Such a thing as an Agricultural Paper we never saw—not even a number of one—till many years after. How can we expect men who were children in such a school, except they are naturally enterprising, to come fully into modern ways, and be posted up with these fast times? If we can only succeed in inspiring the rising generation with a due appreciation of sound and scientific agricultural knowledge, even though all their older fathers do not come into modern ways, we shall feel that our calling is a good one, and that we have not labored wholly in vain. EDS.

HOW POLITICIANS ARE MADE.

It is really ludicrous to think how prominent political leaders are manufactured. On a close examination very few are found to be men of genius, few are men of talent—they do not possess original minds—they have no resources of education, no creative power—they are lay figures, clothed by the good nature of the public with official robes, which do not fit them and are very soon in tatters. Let us see how the thing is done.

We begin, then, by observing that some young man has early abandoned an unprofitable employment, given up some mechanical pursuit, or, having put his hand to the plow has looked back. He wishes to get his living in some other way. He enters the office of some pettifogger, perhaps, and takes small cases in the Justices' Court. Although admitted to practice, he finds that he is likely to "live without causes and die without effects." He then mingles with the primary meetings, gets placed upon a committee, and seeks to become a village Hampden. After a few years of struggling, after having been a delegate to a half a dozen conventions, after agreeing to go for some one else's nomination, upon the condition that his own is to follow, he is sent to the Assembly, extends his acquaintance, and learns what is the value of being with the *ins*, and the disadvantage of being with the *outs*. He sends documents home to the leading farmers, or pushes through some little bill for a new turnpike road, or proposes an alteration in a town line, and soon finds himself ready to run for Congress. Here the tactics of the aspirant are met with the ascendant power of committees. Any lawyer may get to the Assembly; but a seat in Congress leads to general fame, and it is the gift of those who will not part with it for a trifle. Once there, he makes a bold push for position, either by ready declamation or usually by close attention to the business of the House. From this, he returns to his own home, to become the center of a clique and the favorite of committees, who, finding that they have at last obtained the right material, begin to work it up in proper shape, and look forward to the day when, this accomplished, they may "enjoy the triumph and partake the gale." After this the steps are easy. Prominent offices are secured, high offices are run for; possibly a translation to Washington comes next, or a post of honor abroad. Or, finally, when the partisan spirit is hot enough and the inducements held out are strong enough, there is a general uprising of committees, an uproar of county newspapers, a close packing of delegates, and the cliques present the astonished nation with a a regular candidate for the Presidency! We have had enough of candidates manufactured in this way.

Once in power, such men reflect back what they can spare on those who have elevated them. The committee men, the editors, the delegates who have pushed them along during this long period, call for their reward, and the proud, and rich, and pompous old fellows who have condescended to join in this last move, give their sage advice, are ready to enter the Cabinet, or go abroad, or fill the custom-houses and post-offices.

We thus perceive how the abuses of our government are perpetuated by this routine of cliques, of nominations, and of elections. We see plainly enough that there is not the slightest hopes of our return to a more republican, a more virtuous, and a more prosperous state of things, unless we break up, root and branch, the whole system by which this country is managed and betrayed. And the whole of this machinery is worked by a very few persons, and millions of intelligent freemen become their tools. [N. Y. Herald.

CURSE OF ILL-GOTTEN WEALTH.

There is such a curse goes with ill-gotten estate, that he who leaves such a one to his child, doth but cheat and deceive him—makes him believe that he has left him wealth, but has withal put such a canker in the bowels of it, that it is sure to eat it out. Would to God it were as generally laid to heart, as it seems to be generally taken notice of! Then surely parents would not account it a reasonable motive to unjust dealing, that they may thereby provide for their children; for this is not a way of providing for them; nay, it is the way to despoil them of whatever they have lawfully gathered for them; the least mite of unlawful gain being of the nature of leaven, which sours the whole lump, bringing down curses upon all a man possesseth. [Whole Duty of Man.

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MISCELLANEOUS.

THE MOWERS.

BY WILLIAM ALLINGHAM.

Where mountains round a lonely dale
Our cottage roof inclose,
Come night or morn, the hissing pail
With foaming milk o'erflows;
And roused at break of day from sleep,
And cheerily tradging hither—
A scythe-sweep, and a scythe-sweep,
We mow the grass together.

The fog drawn up the mountain-side
And scattered flake by flake,
The chasm of blue above grows wide,
And richer blue the lake;
Gay sun-lights o'er the hillocks creep,
And join for golden weather—
A scythe-sweep, and a scythe-sweep,
We mow the dale together.

The goodwife stirs at five, we know,
The master soon comes round,
And many swathes must lie a-row
Ere breakfast horn shall sound;
The clover and the florin deep,
The grass of silvery feather—
A scythe-sweep, and a scythe-sweep,
We mow the dale together.

The noontide brings its welcome rest,
Our toil-wet brows to dry;
Anew with merry stave and jest
The shrieking hone we ply;
White falls the brook from steep to steep,
Among the purple heather—
A scythe-sweep, and a scythe-sweep,
We mow the dale together.

For dial, see, our shadows turn;
Low lies the stately mead;
A scythe, an hour-glass, and an urn;
All flesh is grass, we read.
To-morrow's sky may laugh or weep,
To Heaven we leave it whether—
A scythe-sweep, and a scythe-sweep,
We've done our task together.

London Athenæum.

WHERE ARE THEY?

What has become of all the modest, quiet, home-loving young ladies we used to see in old times, and read of now occasionally? The sweet, kind sister, and respectful daughter, who shared her mother's cares and duties, and was once the pride and ornament of the family circle? Always dressed according to her position and occupation, conscious of being beloved and useful she was calm, self-possessed, graceful, and could receive her friends without flurry, or apologies, or blushes, because she was found engaged in some useful employment. Now-a-days most of girls, especially those who occupy what is called a "position in society," take pains to have it understood that "Ma keeps a hired girl, and we take music lessons," &c., and they are generally dressed for calls and promenading, and spend the rest of the time among fine muslins and zephyrs, as their *very* white, smooth, ringed fingers abundantly testify.

Nor is this class confined to the large cities, or to the wealthy, but all our little country villages, and even farmers' daughters—yes, and the very "hired girls," are getting exceedingly tasty and genteel, wearing rings, flounces, and furbelows generally, so that if you meet one in the street, it is difficult to tell her "position,"—only, as it happens, a true lady never dresses in that flimsy, flaring, tawdry manner Out upon these follies, girls. What if you should not happen to see the last fashion plate, and did not get your *calico* dress, that you *ought* to be at work in, quite as long, to within the sixteenth of an inch, as Miss Would-be's over the way, which sweeps about an eighth of a yard on the ground—nor your flowing sleeves quite as deep—nor your puff combs exactly the pattern of hers—nor your hooped skirts *quite* as spreading, &c.? *What of it?* Do you think the Union would be dissolved? Or would it postpone your much desired union with some "unexceptionable" young gentleman?

Dear me, indeed! What now? How offended you seem! "Why you never tho't of such a thing in your whole life!" Please pardon. Of course you *never* did! But then, dear girls, there are many ignorant, old-fashioned, but well-meaning people, who are apt to think, when they see such a display of white hands, arms, and bosoms, and so much affectation, simpering and fluttering, and such a hubbub, and so many "oh's" and "ah's," &c., that young ladies really are afraid their excessive charms and attractions will not be discovered and appreciated—when just a little coolness and patience, modesty and a few other rare qualities, would bring all these things about in due season, and in a proper manner. The truth is, our fashionable young ladies drive all really sensible men, who are fit to be husbands, far away from them. No matter whether they have a fortune or not, they wish a wife to possess plain common sense, and true independence; and moreover, they desire your minds to be sufficiently free from folly and prejudice to give them a sincere and true affection.

Do young women ever seriously think about their destiny and position in the world—for what purpose they were created and designed? Do they study the laws of Physiology, and endeavor to render themselves capable to adorn the most beautiful and holy office on earth—that of wife and mother? Then do not consider yourselves mere waxen dolls, or parti-colored butterflies, or walking show cases, any longer. How many of you have ever heard of the advice once given by a very sensible, but antiquated old bachelor? Speaking of a lady's truest attractions, he says—"Whose adorning, let it not be that outward adorning of plaiting the hair, and of wearing of gold, or of putting on of apparel; but let it

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be the hidden man of the heart, in that which is not corruptible, even the ornament of a meek and quiet spirit, which is, in the sight of God, of great price." ULTRA.

[Moore's Rural New Yorker.

GREENWOOD CEMETERY.

People who have not been to Greenwood for two or three years, will be surprised, when next they visit that metropolis of the dead, at the great improvements that have been made in all parts of it.

The grounds now include an area of nearly six hundred acres, all of which is under the minute supervision of gardeners. Greenwood Cemetery is probably the best kept park in the United States. The lawns are in the finest condition—smooth and well defined, with a special provision against injury to the borders. The original forest flourishes in more than its original luxuriance, and thousands of beautiful trees have been planted, and are now of some years' growth. The weeping willows of Greenwood are of remarkable beauty. The profusion of young evergreens is also an agreeable and very appropriate feature. But in no part of the grounds has more striking improvements been made than in the vicinity of the ponds and lakes. The company have, at a great outlay, dug deep wells and placed a powerful steam engine in the grounds, for the purpose of supplying the fountains, which in turn keep the lakes filled. By this means four hundred gallons of water per minute can be procured. These fountains and brimming lakes, surrounded as they are by willows trailing their branches in the water, are perhaps the most attractive feature of the Cemetery.

The lot-owners have done their part also. A large number of monuments, it is true, are pretentious and vulgar, and three of the showiest record the names, respectively, of a celebrated female tobacconist, a world-renowned advertiser of sarsaparilla, and a prosperous keeper of a stall in Washington Market. But, as a set-off to this, the visitor sees, with pride and pleasure, that the *best* monuments, those of most originality and taste, were erected by admiring comrads and a grateful public to the memory of firemen, pilots and captains, who lost their own lives in rescuing infants and women from the fire or from the flood. Such monuments as these honor the community that erect them; and if the brainless millionaire overtops them with his tasteless heaps of polished marble—what could more impressively show the folly of ostentatious expenditure? A gorgeous tomb in Greenwood seems to us to reduce Mrs. Finecut to a more emphatic insignificance than a splendid mansion could, while the lady rustled in satin and crinoline.

One of the curiosities of the place is a monument of a sea captain who is still living. The old gentleman brought with him from Italy a piece of marble and an artist. On arriving at home, he set his artist at work cutting his piece of marble into a fac-simile of himself in the act of taking an observation of the sun with a quadrant. The success of the artist was complete. The eccentric captain bought a lot in Greenwood, had a suitable pedestal made, and placed his marble self upon it, thus building his own monument. He frequently visits his grave, and is fond of exhibiting the statue to his friends.

There are drawbacks to the pleasure of an afternoon visit to Greenwood. The funerals stream in, in an almost continuous procession. There is a part of the Cemetery appropriated to single graves, where space enough for an interment can be bought for ten dollars. On this broad field, over which the green mounds are advancing in line, like a creeping army, burials are always occurring, and they are conducted with a hideous disregard to decorum. This is the way the thing is done: Half a dozen carriages halt at the edge of the great sloping field. The coffin, which has been carried in one of them, is taken under the arm of a man who is in his shirt-sleeves, and is conveyed by him across the field to the grave, which has just been dug. He carries it fast, and precisely as he would carry a log of wood. The people get out of the carriage, and scamper over the ground in indecent haste, *a la* flock of half-flying geese. The grave is reached, and the people gather in a dense mob about it, looking over each other's shoulders, the bereaved mother bending over the grave, choking tears into it. In an instant, without a word or any pretense of ceremonial, the ropes are adjusted, the little coffin goes rattling down, the ropes are jerked from under it and drawn up, and the heavy shovelfuls fall thump, thump, thump, upon the lid; the people looking on in momentary silence, the mother still gazing down into the grave, raining tears upon the sand that is burying so many hopes, and ending a long anguish with a blinding paroxysm of grief. A little way off, in the hearing of this mother, is a group of drivers, talking, laughing, scuffling. In a minute or two the scene is over; the burial party leave the grave; the mother waits till the last shovelful is heaped upon the mound, and then staggers away down the hill to her carriage. This was an Irish funeral. It seems to us that a human body should not be put into the ground quite in this manner. Those who go to Greenwood merely as visitors had better go in the morning. They will not be likely at that time to witness such sights as these. [Life Ill.

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IDLENESS.

There is a fault we all condemn in the young, and too often indulge in without remorse ourselves. That fault is idleness. There is a busy idleness, which sometimes blinds us to its nature—we seem, to ourselves, and to others, to be occupied, but what is the result of it all? What Hannah More calls "a quiet and dull frittering away of time," whether it be in "unprofitable small talk, or in constant idle reading, or sauntering over some useless piece of work," is surely not "redeeming the time;" and yet how many days and hours are thus unprofitably wasted, and neither ourselves nor others benefitted. All women who have much leisure are liable to this fault; and besides its own sinfulness, for surely waste of time is a sin, it encourages a weak, unenergetic frame of mind, and is apt to produce either apathetic content in trifling occupation, or a restless desire for excitement or amusement, to help on the weary time these trifles cannot kill; and those who have their time entirely at their own disposal, with perhaps no definite duty to occupy them, should guard resolutely against waste of time; make duties for yourselves; fix hours for your different occupations; do with your might, whatsoever your hands find to do; and carefully, conscientiously ascertain which of your employments is *not worth* all this care; have a motive, a reason for all you do, and frequently examine yourselves as to what you are doing; and surely you will find time too precious to be either squandered, or frittered, or idled away.

WE DIE DAILY.

The bodies of animals are continually undergoing a series of invisible changes of substance, of which they are entirely unconscious. We look at our hand to-day, as we write, and we fancy it is the same in substance as it was yesterday, or last year—as it was ten years ago. The form of each finger, of each nail, is the same. Scars made in our infancy are still there. Nothing is altered or obliterated; and yet it is not the same hand. It has been renewed over and over again since the days of our youth. The skin, and flesh, and bone, have been frequently removed and replaced. And so it is, more or less, with our whole body. The arms and limbs that sustained us in our schoolboy struggles are long since consigned to the dust, and have, perhaps, lived over again more than once in plant, or flower, or animal. In from three to five years, the entire body is taken out and built in again with new materials. A continued activity prevails among the living agencies to which this hidden work is committed. Every day a small part is carried away; just as if a single brick were every day taken out of an old wall, or a single wheel out of a watch, and its place supplied by another. The body, therefore, requires constant supplies, at every period of its life, of all those things of which its several parts are built up.

DUTIES OF A MOTHER.

She should be firm, gentle, kind, always ready to attend to her child. She should never laugh at him—at what he does that is cunning—never allow him to think of his looks, except to be neat and clean in all his habits. She should teach him to obey a look—to respect those older than himself; she should never make a command, without seeing that it is performed in the right manner. Never speak of the child's faults or foibles, or repeat his remarks before him. It is a sure way to spoil a child. Never reprove a child when excited, nor let your voice be raised when correcting. Strive to inspire love, not dread—respect, not fear. Remember you are training and educating a soul for eternity. Teach your children to wait upon themselves, to put away a thing when done with it. But do not forget that you were once a child. The griefs of the little ones are too often neglected; they are great for them. Bear patiently with them, and never, in any way, rouse their anger, if it can be avoided. Teach a child to be useful whenever opportunity may offer.

[Western Farm Journal.

HEALTH.

Heaven never granted a richer boon than health; and without it, all other blessings are comparatively valueless. Yet it is often lightly esteemed and carelessly thrown away, and never fully appreciated until it is gone. I have seen the mistress of a splendid mansion, surrounded by every luxury which wealth could command, lying upon her couch, pale and miserable, fretful and unhappy. Within her reach were the most delicate viands and exquisite fruits, yet she could partake of none. Health was no longer hers. She had parted with it for the sake of gratifying her vanity, by wearing thin shoes, to display the beauty of her foot, and now, when consumption was preying upon her, she repented her folly, but it was too late; and though she would willingly give all that she possessed, the priceless treasure could not be recalled.

The thin, ghastly-looking gentleman, who reclines in his luxurious easy chair, with his gouty foot upon a pillow, sighs and groans in anguish, and thinks of the many weary nights of pain, when the bed of down and the silken covering could bring him no repose. How he envies the plow-boy, who whistles on the green fields, whose step is

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elastic, and whose heart is light and gay at his toil, while his sleep is sound and refreshing.

What is wealth to the invalid but a bitter mockery which can yield no happiness? Then prize the rich boon of health, ye who possess it, and lift your hearts in gratitude to God, even though your lot be one of poverty and toil.

WOMAN.

The condition of woman in society is one of the measurements of the progress of nations: exactly as civilization advances does woman's condition rise, and woman's influence in society increase. The equality of woman with man is a natural fact; but the two spheres, the male and female, are so incomparably distinct, that the equality lies in there being a female equivalent to every male attribute, and that female equivalent becomes more and more perceived and confessed as the world becomes wiser. In man's own special sphere, woman is inferior to man; in woman's own special sphere, man is inferior to woman. The domestic sphere is feminine; the political sphere is masculine. Man is adapted by nature for continuous labor of one kind; woman is liable to periodical interruptions. The two spheres are alike important and indispensable, but they cannot be compared. It is foolish to compare the two sexes for the purpose of ascertaining the superior; when one is indispensable to the other, where lies the superiority? Even if a man has a stronger head, it will not make him superior; intellectual is not superior to moral character.

A Picture of Life.—In youth we seem to be climbing up a hill, on whose top eternal sunshine seems to rest. How eagerly we pant to attain the summit! But when we have attained it how different the prospect on the other side! We sigh as we contemplate the dreary waste before us, and look back with a wistful eye upon the flowery path we have passed, but may never more retrace. Life is a portentious cloud, fraught with thunder, storm and rain; but religion, like the streaming sunshine, will clothe it with light as with a garment, and fringe its shadowy skirts with gold.

For Mothers' Eyes.—Mothers who encourage their daughters in superficial accomplishments and bold display, are often preparing for them a lifetime of chagrin and misery. On the other hand, when they are trained at home, by precept and example, in retiring, industrious, studious, virtuous habits, they are prepared to be useful and happy throughout life.

PLASTER.

A correspondent propounds a series of questions relative to plaster or gypsum, which are as follows:

1. How does plaster operate, to be of advantage to a crop?

Plaster operates beneficially on certain crops, because of its chemical powers to dissolve and set free certain elements, necessary to promote the growth of the crops to which it is applied. For instance, plaster has been found by actual experiment, to absorb and decompose certain compounds of ammonia, and thus to set it free, rendering this valuable element into a state in which it is readily taken up by the growing plant. It also acts beneficially by fixing and retaining the ammonia which is brought down from the atmosphere by rain or heavy dews, and its effects are therefore more readily perceptible where it has been applied in dry weather, and rain has fallen immediately after.

2. Is it beneficial to all crops?

There are few crops in our dry climate that plaster does not benefit. But plaster is peculiarly beneficial to clover and peas, as the ashes of these plants are found to contain a large proportion of sulphates, and plaster is itself a sulphate of lime.

3. Does clover especially require it?

Yes; there is no crop to which it is of so much importance; and the luxuriance it promotes, is felt in the succeeding crops.

4. When is the best time for sowing?

When it is sown on grass lands or on clover, it may be applied in the spring as soon as vegetation has fairly started. The practice of the farmers in this State is to sow it on their wheat in the spring. We see it stated, however, that very beneficial effects to the wheat crop have been found to follow the application of a heavy dose of plaster in the fall; and this is not improbable, when we consider that the snow which falls during the winter, contains a large amount of ammonia, which the plaster would fix and render available to the crop, instead of leaving it to be dissipated again into the atmosphere, as the snow melted; and a full supply of ammonia is of the utmost consequence to the growth of wheat.

5. How much is required for an acre?

We have known it to be applied in quantities equal to four bushels to the acre. The general practice, however, is to sow it at the rate of a bushel to a bushel and a half per acre. [Michigan Farmer.

Michigan plaster of an excellent quality can be obtained in all our principal Lake shore towns, at a low price. We hope some of our farmers upon light soils will try it.

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For the Farmer.

SAVING SEED CORN.

MESSRS. EDITORS—In fulfillment of my promise, I send you, in brief, my views in relation to the proper manner of saving seed corn. The attention of the farmers of this State has been called to this subject this year, by reason of the great loss sustained in the failure of seed to germinate; and all think it has been from want of proper care in selecting and preserving seed. Let us examine the process of growth, or germination in a good sound seed: first, moisture is absorbed; this dilutes the phosphates in the chit, and thus prepares the first supply of food for the young germ. In this process diastase is developed, which in turn attacks the starch, changing it to sugar, and the gluten and albumen, changing them to starch, and also developes more phosphates —all combining to afford a continuous and healthful supply of food to the young germ. Now we will compare with it the process of growth in a poor seed: the first glance will detect a far greater absorption of water than in the good seed. Now, gently remove the hulls, slightly raise the chit, and we shall find it, in part, or totally, detached from the rest of the grain—thus affording a feeble supply of food to the young germ; or if entirely detached, none at all. We shall further notice a rapid softening of the kernel. The diastase being apparently so far diluted by the excess of water, as to disqualify it from any further chemical action and general decomposition rapidly ensues. From this we see that medium seed may produce a comparatively healthy growth, when the season is favorable—that is, warm and moderately dry. The loosening of the chit from the rest of the kernel—the breaking up of the whole texture of the kernel, so that it will absorb water too rapidly for a favorable germination—is clearly traceable to *frost*. The effect of frost on moisture is well known, and to its expanding power I think we can clearly trace the general failure of the seed to germinate.

From the foregoing I deduce the following rule to preserve seed corn: Select your corn when well mature, (not later than October.) Place it in a dry room—one that the pipe from a family cooking-stove passes through is preferable. Let it remain spread thin on the floor, until warm weather the next spring.

Follow this rule faithfully, and you will never have poor seed corn. Never trust to buy your seed corn in the spring, when wanted. If you are not growing the corn that suits you, go early in the fall and buy it. An observance of this rule by the farmers of this State last fall, would have added one third to their present crop, and saved them thousands of dollars in labor. The whole subject is one that we can profitably study, and at some future time I shall again call your attention to it. DAVID WILLIAMS.

SPRINGFIELD, Sept. 18, 1856.

WIS. FRUIT GROWERS' ASSOCIATION.

A meeting and Exhibition of Fruits of this Association will be held at Whitewater on Wednesday and Thursday, the 24th and 25th of September, 1856.

All members and others interested in Fruit Growing, are respectfully requested to attend, and bring with them their fruits, for the purpose of examination, comparison and discussion.

A. G. HANFORD,
J. C. BRAYTON, } Ex. Com.
H. J. STARIN,

The Farmers and Mechanics' Club also hold their Fair at the same time and place, and altogether it must make one of the most interesting exhibitions of the season. The Club has purchased and fitted up capacious and neat grounds, and is, all in all, an enterprising institution—bound to prosper highly, and greatly benefit that central portion of the State. Success to each of them. EDS.

For the Farmer.

FARMER'S SCALES.

MESSRS. EDITORS—I noticed in a number of the FARMER, of an early date, (the May or June number, I think,) a communication from one of your correspondents, making inquiries for a class of Scales, (not in general use,) of less draught, and less expense, than the ordinary Hay Scales. I would say to your correspondent, and the farmers of Wisconsin generally, that I design to be at the State Fair with Scales of the class called for by your correspondent. These Scales are from the "Forest City Scale Works," at

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Cleveland, Ohio. They are of two tons draught, with a platform five feet by six, and may be erected substantially like the Hay Scales, or set on the floor of a building like a Warehouse Scale. They will cost about ninety dollars.

A. B. MUREH.

APPLETON, Wis., Sept. 20, '56.

For the Farmer.

TO CURE THE BITE OF A RATTLESNAKE.

EDS. FARMER, GENTLEMEN—Noticing inquiries in the Watertown Chronicle about the best remedy for the bite of a rattlesnake, I thought it would be well to lay my own experience before the numerous readers of the FARMER. I was bitten in my foot last May, while engaged in the field, at a distance of about forty rods from the house. I immediately scraped the bite with my knife, then walked to the house, and applied salt and the yolk of an egg, which relieved the pain very much. I bound a bandage around my leg and kept it wet with cold water, and although it swelled very much below the bandage, it did not swell at all above it. I think it is a cure. L. P. FINCH.

EDEN, Iowa, Aug. 28, 1856.

SAVE YOUR BACON.—About a couple of years ago, we were entertained at the house of a friend with a good, old fashioned dinner of eggs and bacon. We complimented our host on the superior quality of his bacon, and were curious to inquire the way to like success in the preparation of a dainty article of diet, though one that is better fitted for the palate of an epicure than for the stomach of a dyspeptic. To our surprise we were informed that that portion of our meal was cooked eight months before. Upon asking for an explanation, he stated that it was his practice to slice and fry his bacon, immediately upon its being cured, and then pack it down in its own fat. When occasion came for using it, the slices slightly refried, had all the freshness and flavor of new bacon, just prepared. By this precaution, our friend had always succeeded in "saving his bacon," fresh and sweet through the hottest of weather. [N. Eng. Enquirer.

BAKED TOMATOES.—Tomatoes peeled and baked on a flat dish, as we bake apples, or even baked without peeling, and when done seasoned with salt, butter and pepper, is, we think, the most luscious way of preparing this excellent fruit. [Exchange.

DOMESTIC ECONOMY.

TO PRESERVE BUTTER A LONG TIME.—The late Dr. Anderson recommended for preserving butter a composition of salt, 2 parts; saltpetre 1 part; sugar 1 part; one ounce of this mixture to a pound of butter. It seems that butter thus treated will keep sweet for a lengthened period, but that for the first fortnight it does not taste well.

"SUCCOTASH," says Mr. Beecher, "is a liquid compromise between corn and beans. It is perfect when its flavor is that of corn lapsing into bean, and of bean just changing into corn. In short, it is a dish whose flavor represents the evanishing point of both beans and corn, towards a mystic vegetable union in some happier sphere. But to be perfect, there should always be a hierephantic bit of pork presiding over the nuptials, and giving its unctious blessing.

PRESERVING EGGS.—The North-Western Farmer has tried the following method of preserving eggs, and recommends it. It is simple, and undoubtedly efficacious. You may try it with confidence: Take a sieve, and cover the bottom with eggs; then pour boiling water upon them, sufficient to give them a thorough wetting, permitting the water to pass off through the sieve. Take them out and dry them; then pack them in bran, the small ends down; and your eggs will keep *forever*.

TO MAKE TOMATO FIGS.—Select perfectly ripe and sound fruit, and having procured a jar with a wide mouth, deposit a layer of finely pulverized brown sugar on the bottom, and then a layer of tomatoes; and so on alternately, until the jar is filled to the top. Then take a quantity of sugar in proportion to the size of the jar, and dissolve it in pure water; pour it in, and having covered the top with a layer of sugar, press the whole firmly and closely down. By this operation space will be provided for more, and the process may be repeated until the jar is filled to the entire extent of its capacity. Place a thin stratum of sugar on top, and set away. The quantity of dissolved sugar applied, should be just sufficient to moisten, not dissolve, that between the strata or layers of fruit. This is a simple method, but effectual, and the figs are excellent.

It is said that rats may be expelled from cellars and granaries, simply by scattering a few stalks and leaves of mullen in their paths. It affords, therefore, a very easy method of getting rid of a most perplexing evil, and much more economical and less troublesome than gunpowder, "rat exterminator," cats, or traps.

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EDITOR'S TABLE.

The State Fair.—

We are assured that every arrangement is being made to have the most interesting and popular State Fair ever yet held in Wisconsin. The grounds are being amply and beautifully fitted up, and every provision is being made for the comfort and convenience of those who attend.

The Railroad Companies have uniformly agreed to carry passengers at half-price, and animals and articles for exhibition *free;* except the La Crosse & Milwaukee Company, which proposes to charge half-price on animals and articles. Many can avoid this, however, by taking the Watertown Road, which is able to see its interest in going in for the liberal policy. (We hope all companies will soon learn that they owe the people some obligations for the special privileges they enjoy, and can well afford to be liberal once a year—especially as that liberality usually pays them a large extra profit; in fact, judicious liberality always pays best to all parties.)

A Word to Those who Attend with Their own Teams.—Gentlemen, let us suggest to such of you as have good comfortable teams, with which you can attend, to rig up the requisite seats and conveniences for carrying passengers to and from the Fair grounds, during the exhibition. As the crowd will undoubtedly be very large, and the grounds some little ways from the hotels and boarding-houses, it will necessarily require a large number of teams to carry and bring; and for the good accommodations of the company, it is highly important to have an ample provision of this kind; not only that people may come and go, but that they may be able to do it at a fair price, and without feeling *gouged.* Now a dime is price enough, for carrying or bringing, with any common conveyance; and we hope those who charge more, will get nothing to do. A good common team, with an active gentlemanly driver, can make from $15 to $30 per day at that price; and that ought to satisfy any man who has any conscience. We hope to see any quantity of good teams on the ground, duly placarded in conspicuous letters, to carry or bring for A Dime. Such placarding saves all questioning, or misunderstanding about prices, and is the fair thing between all parties. Any persons wishing to visit the Fair with their teams, can easily pay all expense in this way, and make lots of money besides.

Country Livery men, and farmers with good teams, be on hand for an open field and fair competition. Competition is the life of business, and the only practicable check upon extortion.

Patent and Interesting Machinery.—We expect to have the Halladay Self-Regulating Wind-Mill that we spoke of in the last number, in operation on the Grounds, so that all who have an awakened interest in these great labor-saving machines, can form an opinion for themselves. We deem it a matter of so much importance, that we shall incur considerable expense to put the thing in actual operation.

We shall also have on exhibition Daniels' Famous Self-Sharpening Straw Cutter, capable of cutting a ton of hay or straw per hour. The same that took the premium at the N. Y. State Fair last fall. It is said to vastly excel anything of the kind ever seen in the West. We have taken pains to get it all the way from New England, on purpose to show it to our people at the Fair.

We also expect to have one of Morris' Improved Chain Pumps, capable of drawing water from deep wells, without leakage or waste of power. It is said to be a wonderful improvement.

We still expect one of Willis' Stump Machines, but do not know certain.

Office at the State Fair.—

We shall have an office on the State Fair Grounds, where we shall be happy to see all our friends, and particularly those who wish to subscribe for the Farmer. We shall also have a full assortment of Agricultural and Horticultural Books for sale at New York prices. These books are just such as every farmer ought to buy. Those wishing to make purchases will do well to look our stock over before buying.

Blunders in Binding.—

We have heard complaints from several about mistakes in binding the September No. We regret that they occurred, and have given an extra caution for the future. All having defective numbers, will at all times on notifying us, receive perfect ones, without delay or expense to them.

January Numbers.—

We would repeat what we said in the last number, (which some do not seem to have read, as they continue to inquire by letter,) that we are just now out of January numbers. Having to reprint a new edition, to supply our large list of subscribers, we have not yet got them done, but shall in season for binding, and no mistake. None need fear.

The Best Kinds of Domestic Fowls.—

Numbers of our readers are inquiring of us as to the best kinds of fowls, for actual family use, devoid of fancy or speculation. It is a subject with which we are not very well acquainted. In fact, we are at some loss in determining for ourselves, what kinds among the great variety presented, and

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boasted of, we will select to stock a snug establishment we have recently rigged.

The main merit we would wish, for our town residence, is good layers; as we hardly suppose it would pay to undertake the raising of many chicks, if any, within close enclosures. Then again, we would like a good variety for the farm, that are both layers and setters; and would say as to our own views, that we don't consider extraordinary size any merit, unless coupled with other advantageous characteristics.

Who will tell us which among the *Patents* are best, merely as layers; or in the double capacity of laying and reproducing? or if any are better than the old fashioned native stock?

State Historical Society.—

The second Annual Report of this highly flourishing Society is published, and we are indebted to its worthy Secretary, L. C. Draper, Esq., for a copy. Mechanically it is a fair specimen of a book, except the binding, which is *ordinary State style*, a mere paper cover, like the primers we got in our school days, except there used to be pictures on them. But the contents are the main thing, and they are varied and interesting—comprising many valuable sketches, narratives, and incidents of early history, together with reports of the proceedings of the Society.

The remarkable zeal and peculiar abilities of Mr. D., as its chief actuary, are becoming matters of such universal and just notoriety as hardly to need a reference from us. All who are familiar with the history and progress of the Society, know how much of its success and prosperity is due to him. Worthy as the object is admitted by all to be, yet how few in this fast age can be found, willing to forego money making and speculation, to devote their time and talents to such labor. Lucky is it for Wisconsin, and the West, that there is one, and he so eminently fit. He illustrates how sure any worthy project is of success, if it has even one thoroughly devoted mind to work for it. The Picture Gallery is becoming a highly attractive feature already, embracing many fine portraits of our most eminent citizens, as well as many connected with our early history. The Library already exceeds 3,000 volumes, besides great numbers of pamphlets, and is rapidly increasing. In addition to all of which, Mr, D. has made a large collection of curiosities in the way of ancient coins, autograph letters, and other things too numerous to mention.

The whole will well repay examination to any one visiting Madison; and to any one not acquainted, we would say, that it will give us pleasure to introduce them at any time, either to Mr. Draper, or to the rooms of the Society. Active, intelligent men, all through the State, should become corresponding members of the Society. It costs nothing, and enables them to be useful in gathering up the historic facts of our various localities. We shall be happy to propose any who wish us to do so.

Waukesha Co. Fair.—

We had the pleasure of attending this exhibition, on the 18th of September, at Oconomowoc. The day was rather bleak and windy, but not so much so as to prevent a goodly attendance. Waukesha is one of the old settled counties of the State, with much more than a proportion of our best farmers, and having had an organization for years, as might be expected, they are well trained; and to get up a good fair is no great effort for them.

The show of animals was fair, generally, and in some departments good. We did not see any considerable number of horses, worthy of note, excepting several spans for all work, at the Plowing Match.

Among the cattle, there was rather a small show of thorough breeds, or good grades. The herd of Messrs. Dousman and Lewis, of Waterville, exceeded any other lot. Their bull was a particularly fine animal. Among grades, the most conspicuous was a four year old steer, raised and exhibited by B. R. Hinkley, Esq., of Summit. He is one of the finest models we ever saw; stands five feet three inches high at the shoulder, girts seven feet five inches, and measures the same length; though in only ordinarily good condition, he weighed but a little short of 2,000 pounds. His color is a light red, with handsome horns, partaking more of the Devon than the Durham style. We doubt if he has a match in the State. If he can be well matched in size and appearance, we will pay $200 for the pair, and have beyond a doubt, the premium cattle of the Northwest. Who's got his mate?

There was a large and fine show of Sheep—nearly forty pens in all—though wholly confined to Spanish and French, with the exception of one Southdown. (Waukesha is much the greatest Sheep County in the State, we think.) Among the finest on exhibition were those of Messers. Edgerton, Dousman and Lewis, of Waterville; Jencks, of Oconomowoc, and Robb, of Robbsville, (or North Prairie Station.) Mr. Robb's are, some of them, thorough bred French, from the Patterson stock. One in particular, was an immense specimen of a sheep—equalling the largest of the coarse-wools, and with a fine silky fleece.

Messrs. Dousman and Lewis exhibited a done up fleece, shorn from one of their sheep, which came as near the "Golden Fleece" we read of, as anything we have

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often seen. They have a large number of splendid sheep on exhibition, of Spanish Merino stock—heavy shearers, and in fleeee, as fine as silk. Mr. Lewis is right from the sheep country of Vermont, and if he don't know a thing or two about his business, we are mistaken, that's all. Most of these fine Waukesha County sheep will be at the State Fair, and afford all who wish, a chance to see them.

The show of other animals was decidedly small, and nothing special. The same may be said of Agricultural Implements and Machinery. The Fruit Show was confined almost wholly to Apples, and not very large at that, for so old a county. Messrs. Hanford, Rathbun and Peffer, were the principal exhibitors; and in the list of the latter were several fine specimens of seedlings—large, good flavor, and handsome. Mr. P. also had some fine specimens of grapes, and among other things a splendid egg-plant, loaded with fruit, as large as large turkies' eggs, and delicate, and beautiful. It was the best specimen of egg-plant we ever saw. All the above gentlemen are evidently nice experimentalists, and are doubtless doing much to promote fruit culture in their respective neighborhoods. We are indebted to Mr. Hanford for several fine specimens of apples, from two of which we made the outlines given in this number.

We saw several fine lots of Mercer and Meshannock potatoes; but don't know who raised them; also some other good vegetables.

The Ladies' Show (as well as the show of ladies,) was *fair*, especially in the Bread Department, several loaves of which looked good enough to eat. Then the quilts, worsted work, and lesser fixings, were about as usual. We didn't see any good stockings.

But we must conclude, not for want of material, but for want of space; but cannot do so without a word about the Plowing, which, as a whole, was excellent—especially that done by the plowman of E. W. Edgerton, Esq. It struck us as hard to beat.

Then the Address, by our friend J. R. Bates, Esq.. of Jefferson Co., was decidedly a good thing of its kind, and was attentively listened to, to the end. We could not stay to hear the award of premiums.

Bound Volumes for Premiums.—

We are under many obligations to the numerous county Agricultural Societies that have adopted the FARMER for premiums. We shall aim to deserve the compliment. If, perchance, any persons having it awarded as a premium, already take it, we will in all such cases supply any one of Saxton's list of books, of equal value, instead, with pleasure.

We have printed about 1000 extra copies, the present year, on purpose for agricultural premiums. We shall have them neatly bound by the first of December—in muslin, with lettered backs, at $1 per copy. We had much rather furnish them as a general thing, as far as they will go. than the current volume of the next year. And inasmuch as it will contain much of the proceedings of the County and State Agricultural Societies, and perhaps their only printed or permanent record, as well as a good record of our agricultural and business interests in general—and, withal, the first volume of the series—we think as many as possible, will do better to commence with this year, and go on regularly hereafter. We will warrant the volume to be as neat in its appearance as any of our State-made books that have yet appeared. Still we will leave this matter wholly to the option of Societies.

Grant Co. and Western Wisconsin.—

Our friend COVER, editor of the Grant County Herald, thinks we have not as yet sufficiently treated on the fine section of country embraced in his region of the State, and especially the peculiarly rich soil of Grant Co. Such may be the fact. and if so, we shall plead as our excuse, that we look mainly for such articles as treat on local peculiarities to the correspondents of such localities; and while we have constantly urged the enterprising, from all quarters of the State, to contribute to the columns of the FARMER, we confess, with regret, that communications from the Western portions of the State have been peculiarly scanty—amounting to almost none at all. Why this is the fact we are not able to say, but presume it merely the result of accident.

If hard continued labor and unwearied effort, on our part, can enable us to get up a good, cheap, and acceptable journal for all parts of the State, we mean to do it. Those who do more than we do, for the money, will work for less than nothing, we know. We hope and trust that our labors will be duly appreciated, and our faults leniently treated by an indulgent public. Our friend C. knows something of the labor of getting up a readable, and good paper, and how difficult it is to always suit everybody, eepecially in this intelligent age, when every one is a good judge, and critic, on all common matters. If we suceeed in making the FARMER as good an agricultural journal as the Herald is a newspaper, we shall be content.

The State Geological Report will soon be before us, and will undoubtedly furnish abundant material for extracts and comments upon Western matters.

By the way, when is the Grant County Fair to be held? If possible, we should be happy to attend and make the acquaintance of our friends in "Old Grant."

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Beardless Barley.—

We recently received several heads of this novel kind of barley, from Mr. J. W. Briggs, of West Macedon, N. Y., who represents it as having come from some portion of Asia. He further claims that it does remarkably well in our climate. The specimens received by us, are long, handsome, good sized heads, with never a beard upon them; the advantage of which every one can appreciate who has ever worked among the old-fashioned goat-bearded barley.

Mr. B. offers to send a specimen head to any one addressing him and enclosing a stamp to pre-pay the letter, and any additional ones he may order at three cents each, until his stock, which is not large, is exhausted. We shall exhibit the heads above mentioned at the State, and Dane County Fairs. They may also be seen at the State Agricultural Rooms.

Our Exchanges.—

The first number of the twelfth volume of the Scientific American comes to hand, looking if possible better than ever. It is certainly the most sterling thing of its kind that comes to our table; so rich in illustrations of everything interesting in the mechanical or scientific world; and what is so interesting now-a-days, as our progress in those great departments of human advancement?

Every intelligent man in the country ought to take, and read, the Scientific American, if he would be posted up in the Patents and improvements of the day. It is the only complete record we know of. Subscription price, $2 per annum. Address Munn & Co., New York.

The Prescott Transcript—

Comes to us enlarged and improved, and is among the best papers of the State. Its editors and proprietors, Messrs. Young & Gibbs, are enterprising men, and are bound to prosper. Prescott is one of the best towns in the Northwest, and in one of the best regions of country. Success to the new country and its pioneer editors.

Dane Co. Fair.—

Every arrangement is being made for a fine time at this Fair, to be held on the 2d and 3d of October. We hope to see a good turn out from our own, and as many of the enterprising from other counties as possible.

Hon. A. C. Barry—

Will deliver the Address at the State Agricultural Fair.

Travelling Threshing Machines.—

A correspondent wishes us to ask, if there is any of this kind of machine now in use, and if so how they work? We suppose that kind is meant, that threshes in the field and distributes the straw as it goes. We have not seen one in several years.

Patent-Office Seeds.—

We hope to hear from all who have anything important to communicate as to the result of their experiments with Patent Office seeds. We already learn from a number, that the Spanish Spring Wheat rusted badly. We are sorry, as it was so handsome and white, we hoped it might prove susceptible of advantageous cultivation among us.

Our Milwaukee Advertisers.—

Those attending the State Fair at Milwaukee will have a fine opportunity to examine the stocks of goods advertised in the Farmer. It will be found on enquiry that we are advertising none but the first class houses in their various lines of business.

For instance, H. J. Nazro & Co., as dealers in Hardware, Stoves Iron, Agricultural Implements and Tools, and everything else in that line of trade, on a scale so stupendous and at the same time so reasonable in prices as to make every Wisconsin man proud of such an establishment, and wholly satisfied with their deal. It is the best mercantile establishment of the kind in the Northwest, and we know by actual observation that they sell as low as goods can be sold by any other house. This they are enabled to do from the fact of being large wholesale importers of all staple goods, and having no intermediate profits to pay.

Dry Goods.—

Those wanting anything in this line, will find a splendid stock at Jackson & Luxton's, or the *Bee Hive*. They claim to be unsurpassed in extent and variety, or in prices. We hope our lady friends will look them up. See advertisements of both the above establishments on the last page of the cover.

The Establishment—

Of M. G. Elmore & Co., 156 East Water Street, Mil., has one of the finest displays of Crockery and Glass Ware in the whole West, and we have been able to make bargains with them to our entire satisfaction. Read their advertisement and give them a call, those of you who wish to buy.

Jewelry.—

The two leading establishments of Milwaukee and the West will be found advertised in our columns—Messers. Loomis & Hoes and A. B. Van Cott. What they have not got no one need wish. They are on nearly opposite corners on East Water and Wisconsin Streets, and their establishments are well worth seeing, out of curiosity even, if one does not buy. But we would like to know who can help it if they have any money to spend.

We hope those in from the country at the Fair, or at any other time, will visit the

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foregoing sterling establishments. They will find there is no gammon in our representations about them. Not a bit.

A Waukesha Co. Farm.—

The Farm advertised for sale by J. S. FILLMORE, Esq., in this number, is worthy the notice of those who would like a good location and a good farm in one of the oldest and best counties in the State, at an unprecedentedly low price—$18 and a fraction per acre—not what the building originally cost. It is a farm that we have personally known for sixteen years, and did not suppose it could be bought for twice the money. It certainly must be cheaper than wild, naked prairies in Iowa, 100 miles from a Railroad, at $10 and $15 per acre.

Cahoon's Seedling Pie-Plant, &c.—

See his advertisement, certificates, &c., and if you are not satisfied at that, call and see a specimen of Pie Plant in our office. It reminds us forcibly of the *Gigantea Washingionia*, or big Pine tree of California, and bears the same relation to common Pie Plants. Neither MR. CAHOON nor his articles need any especial commendation from any one in this State. He is an institution among us, and everybody already knows it. That's a fact.

Lumber.—

See the advertisement of W. A. P. MORRIS. They do say he undersells his neighbors considerably, the truth of which every one can ascertain for himself.

Agricultural Books.—

We continue to call the attention of all who read, to the splendid lists of books advertised by C. M. SAXTON & Co. They include everything in the line of Agriculture, Horticulture and the useful aits, and are uniformly cheap. We intend to keep a full stock of them on hand, *for sale*, hereafter, at *New York prices*. Meantime any who can order easier direct from the publishers, can always do so by mail, *free of postage*, and get anything of the kind at N. Y. prices. The farmers, reading men and school districts of Wisconsin and the West, should invest many thousands in these books, during the present fall and winter. How could it possibly be better invested? We certainly don't know.

The Madison Nursery—

Is a nice establishment, and one where everything offered for sale is choice and good. Our Friend Mr HAND is a neat practical nurseryman and gardener, (from the Old Country,) and seems fully to understand his business. All passing his est ablishment, on the great highway leading north-east from the city, would do well to call and examine his stock.

The Card of Messrs. Carpenter, Noyes & Co.,—

Real Estate and Loan Agents, will be found among our advertisements. They are active business men.

Bacon's Madison Mercantile College,—

Advertised in this No., is now in full course of business and open for the reception of students. See advertisement.

The River Bank Nurseries, Rochester, N. Y.—

Are also advertised in this No. Vide Wholesale Price List, &c.

A FIVE DOLLAR LIBRARY,

FOR FARMERS!

The American Farm Book,	$1 00
Diseases of Domestic Animals,	'75
Brown's Field Book of Manures,	1 25
The Stable Book,	1 00
Nash's Progressive Farmer,	'60
Stevens' Land Drainer,	'50

This Library is arranged with a view to supplying the greatest amount of practical instruction, without needless repetition.

At least this much of an Agricultural Library should be in the hands of every Farmer in America.

Our descriptive Catalogue of Agricultural Books will be sent to any persons who will favor us with their address. C. M. SAXTON & CO.,
Agricultural Book Publishers,
No. 140 Fulton Street, New York.

OCT, 1 1856. 1m.

I AM NOW RECEIVING

MY LARGE

STOCK OF LUMBER,

Consisting of

FLOORING, WIDE AND NARROW,

Seasoned—Joists of all Lengths and Sizes, Furnishing Lumber, (Kiln Dried by Bulkley's Celebrated Patent Process.)

A. NO. 1 SHINGLES, SUPERB LATH,

(Dry,) a Splendid Lot of Clear, Dry Pickets, Timber, and, in fact, Everything in my Line.

HAVING PURCHASED

At the lowest rates, being near the Depot, thereby saving great expense in hauling, and having no partner with whom to share profits, I can sell at the

LOWEST PRICES.

All Persons purchasing Lumber, will find it to their interest to give me a call before purchasing elsewhere.

W. A P. MORRIS,
Office Near the Depot, on Morris Street.

MADISON, Wis., Oct. 1, 1856. tf.

Fruit Trees.

A CHOICE Collection of Trees, Shrubs and Plants, for sale at the NEENAH NURSERY, comprising Apple, Pear, Plum, Cherry, Quince, Grape Vines, Gooseberries, Currants, Raspberries, &c., &c. Victoria and Tobolsk Pie Plant Roots, by the dozen.

Roses, Dahlias, Peonies and Shrubbery in variety.

NURSERY STOCKS.

50,000 thrifty yearling Apple Stocks, at $5 per 1000.
10,000 Canada Plum Stocks, one year old, prime, at $8 per 1000. 1000 Locust plants, at $10 per 1000

☞ Orders enclosing the money promptly attended to.

THOMAS COOKE.

NEENAH, Winnebago Co., Wis., Oct. 1, '56. 1m.

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FOR SALE,

CAHOON'S SEEDLING PIE PLANT.

Gooseberries,

CURRANTS, GRAPE VINES, BULBS,

SHRUBBERY, TUBERS, &C., &C.

B. P. CAHOON'S Seedling Pie Plant. Length of Stock 26 inches, and circumference 43 inches.—Weight, 3¼ pounds. Circumference of the Leaf 22 feet. Product of one root at one cutting, forty-eight pounds. I will securely pack in boxes, and forward according to directions. Ten Roots for $5; Five Roots for $3; One Root for $1; by the Hundred, for $40.

Cash, in all cases, to be sent with the order.

TESTIMONIALS:

From the American Institute Proceedings, Aug. 5, A. D. 1856:—

MAMMOTH PIE-PLANT.—Solon Robinson exhibited a stalk of Cahoon's Mammoth Seedling Rhubarb, grown at Kenosha, Wisconsin, that excited considerable curiosity. It was cut of a box sent to the Tribune Office for distribution, and some of it on trial was found as rich and tender as that of smaller growth. It is supposed to be the most productive variety grown for culinary purposes, and should be in every market garden, and then, possibly, it would be grown in such abundance that it could be purchased by people in ordinary circumstances.—*N. Y. Tribune.*

Association for the Exhibition of the Industry of all Nations, NEW YORK, July 4, 1854.

B. P. CAHOON, Esq.—Dear Sir—This is to certify that specimens of your Seedling Pie Plant are on exhibition at the Crystal Palace, and deserving of special approbation for mammoth size and excellence of quality. They are superior to any production of the kind on exhibition.

Yours, Truly,
P. T. BARNUM, President.

MAMMOTH PIE PLANT.—B. P. Cahoon, Kenosha, Wis., has just sent us three Pie Plant leaf stalks that outgo anything we have ever seen of the kind before; as after performing the long journey from their place of growth—in what manner we are not informed—the three stalks weigh eleven and a quarter pounds.—*N. Y. Tribune.*

To the Cincinnati Horticultural Society:—

Being on a tour through Wisconsin, I called upon Mr. B. P. Cahoon, of Kenosha, who has a remarkable variety of Seedling Rhubarb. I examined his plantation of about 9,000 plants, and its wonderful properties have not been overrated. The Victoria I saw growing alongside of his Seedling, subject to the same treatment—soil identical—would not weigh one-fourth as much as the Cahoon Seedling. I can, through your Society recommend the plant to the notice of amateurs and cultivators as the best plant known. His stalks for market would measure from three to four inches wide, two or three inches thick, and two feet long, and so tender that many leaves I saw broke down with their own weight. It is a chance seedling, originated by Mr. Cahoon, from the seed given him at Chicago, and was the only plant from the seed that was worth cultivation.

Respectfully, Yours, JULIUS BRACE.
Cincinnati, August 24, 1855.

We counted on one root Fifty-five stalks, of which the longest was two feet in length from root to leaf, and would girt eight inches or more. The others were of all sizes down to fifteen inches in length, and an inch in diameter, though the average would be twenty inches long and four or more in circumference. This root was not an unusual one, and was only an average of those which have stood three years and are allowed a fair chance. Mr. C. showed us a stalk preserved in spirits, which is five and a half inches wide by twenty-seven long.—*Prairie Farmer*, for September, 1855.

B. P. CAHOON.

KENOSHA, Wis., Oct. 1, 1856. 2m

MADISON NURSERY,

NORTH END OF WASHINGTON AVENUE,

BY JOHN HAND,

WHO offers to his Patrons and the Public, at reasonable prices, the following varieties of Fruit Trees, and Ornamental Shrubbery, &c., consisting in part of Apples, Pears, Plums, Cherries, Grape Vine, Large English and Houghton's Seedling Gooseberries; Black, Red and White Grape Currants; Fastolf and White Antwerp Raspberries; Siberian Crab, Radford's Giant, Myatt's Victoria and Mammoth Rhubarb, or Pie Plant; Giant Asparagus; eight varieties of choice Strawberries; Dwarf and Climing Roses in great variety; all kinds of Ornamental Shrubbery suited to the climate, among which will be found large well furnished plants; also a good variety of Herbaceous Plants—Bulbous Roots, &c.

The above are all grown in Madison. They all stood the severity of last winter without injury.

All orders promptly attended to, and delivered free of cartage within the limits of the city.

MADISON, Oct. 1, 1856. 2m.

WHOLESALE PRICE LIST OF THE

RIVER BANK NURSERIES,

ROCHESTER, N. Y.

200,000	Apples, one year old,		$20.00	per 1,000.
100,000	" two "		35.00	"
100,000	" three "		62.00	"
80,000	" four "		85.00	"
20,000	Cherries, 1 yr. old,	$12.00 per 100;	100.00	"
10,000	" two "	16.00 "	140.00	"
30,000	Dwarf Pears, 1 yr.	18.00 "	160.00	"
10,000	" two yrs.,	25.00 "	250.00	"
15,000	Stand. Pears. 1 yr.	16.00 "	160.00	"
8,000	" two yrs.,	25.00 "	250.00	"
20,000	Peaches, 1 year,	10.00 "	80.00	"
5,000	Apricots "	12.00 "	100.00	"
10,000	Plums, "	20.00 "	180.00	"
5,000	Grapes, 2 years,	10.00 "	100.00	"
3,000	" 1 year,	8.00 "	75.00	"
2,000	Quinces 1 yr.,	15.00 "	150.00	"
8,000	Currants, 1 yr.,	7.00 "	60.00	"
4,000	" 2 yrs.,	9.00 "	90.00	"
3,000	Gooseberries, 2 yr.	10.00 "	90.00	"
5,000	Raspberries, 1 yr.,	5.00 "	40.00	"

STOCKS.

200,000	Apple Seedlings, 2 yrs. old,	$4.50	per 1,000.
100,000	" " 1 yr,	2.500	"
80,000	Pear, 1 yr.,	15.00	"
50,000	Plum Seedlings, 1 yr. old,	14.00	"
60,000	Cherry, " " "	5.00	"
30,000	Osage Orange, " "	5.00	"

I would say to those about starting in the business, that I will offer great inducements when large quantities of the above are taken, both as to time and price, on their sending me a list of articles needed.

P. S.—I will also receive and fill orders for Apple Grafts, packed and delivered at the Railroad Depot, free from charge, for $7 per thousand, in quantities of from one to two hundred thousand of the best varieties.

☞ Workmanship done in the best manner by experienced hands. GEO. CHERRY, Proprietor.

Office, 106 State Street, Rochester, N. Y.

OCT. 1, 1856. 2m.

CARPENTER, NOYES & CO.,

REAL ESTATE AND LOAN AGENTS,

AND

Money Brokers,

MADISON, - - - - - - - - WISCONSIN.

Will buy and sell Real Estate, invest Money and negotiate Loans for non-residents and others, pay Taxes, collect Rents, locate Land Warrants, buy and sell the same on commission, examine and perfect Titles, insure Life and Property in responsible Companies, &c., &c.

S. D. CARPENTER,
REUEL NOYES,
ROLLA A. LAW.

MADISON, Oct. 1, 1856. tf.

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AGRICULTURAL BOOKS.

C. M. SAXTON & CO.,

No. 140, Fulton Street, New York,

PUBLISH THE FOLLOWING BOOKS FOR THE COUNTRY,

And will Send Them, Free of Postage, to any part of the United States, upon receipt of the Price.

1. The Stable Book—the best work on the Horse $1 00
2. The Horse's Foot, with directions How to keep it Sound, paper 25 cts., cloth, 50
3. Brown's American Bird Fancier; paper 25 cts., cloth 50
4. Dadd's American Cattle Doctor, well bound in Cloth 1 00
5. Dana's Muck Manual, cloth 1 00
6. Dana's Prize Essay on Manures 25
7. Stockhardt's Chemical Field Lectures 1 00
8. Blake's Farmer at Home 1 25
9. Buist's American Flower Garden Directory 1 25
10. Buist's Family Kitchen Gardener 75
11. Norton's Scientific and Practical Agriculture, 60
12. Johnstone's Catechism of Agricultural Chemistry, (for schools,) 25
13. Johnstone's Elements of Agricultural Chemistry and Geology 1 00
14. Johnstone's Lectures on Agricultural Chemistry and Geology 1 25
15. Downing's Landscape Gardening 3 50
16. Fessenden's Complete Farmer and Gardener, Cloth 1 25
17. Fessenden's American Kitchen Gardener, Cloth 50
18. Nash's Progressive Farmer 60
19. Richardson's Domestic Fowls 25
20. Richardson on the Horse—Varieties, manner of Breeding, &c., 25
21. Richardson on the Diseases and Management of the Hog 25
22. Richardson on the Destruction of the Pests of the Farm 25
23. Richardson on the Hive and Honey Bee 25
24. Milburn and Stevens on the Cow and Dairy Husbandry 25
25. Skinner's Elements of Agriculture 25
26. Topham's Chemistry made Easy, for the use of Farmers 25
27. Allen's Treatise on the Culture of the Grape, 1 00
28. Allen on the Diseases of Domestic Animals 75
29. Allen's American Farm Book, 1 00
30. Allen's Rural Architecture 1 25
31. Pardee on the Cultivation of the Strawberry, Raspberry, &c. 60
32. Pedder's Farmer's Land Measurer 50
33. Phelps' Bee-keeper's Chart 25
34. Guenon's Treatise on Milch Cows: paper 38 cts., cloth 63
35. Gunn's Domestic Medicine—a book for every married man and woman 3 00
36. Randall's Sheep Husbandry, 1 25
37. Youatt, Randall and Skinner's Shepherd's Own Book 2 00
38. Youatt on the Breeding and Management of Sheep $ 75
39. Youatt on the Horse 1 25
40. Youatt, Martin and Stevens on Cattle 1 25
41. Youatt and Martin on the Breeds and Management of the Hog 75
42. Munn's practical Land Drainer 50
43. Stevens' Book of the Farm, complete, with 450 illustrations 4 00
44. The American Architect, or Plans for Country Dwellings 6 50
45. Thaer, Shaw, and Johnson's Principles of Agriculture 2 00
46. Smith's Landscape Gardening, Parks and Pleasure Grounds 1 25
47. Weeks on the Honey Bee; paper 25 cents, Cloth 50
48. Wilson on the Cultivation of Flax 25
49. Miner's American Bee-keeper's Manual 1 00
50. Quinby's Mysteries of Bee-keeping 1 00
51. Cottage and Farm Bee-keeper 50
52. Elliot's American Fruit Grower's Guide 1 25
53. The American Florist's Guide 75
54. Every Lady her own Flower Gardener; paper 25 cts, cloth 50
55. The American Rose Culturist, paper 25 cts., Cloth 50
56. Hoare on the Cultivation of the Vine 50
57. Chorlton's Cold Grapery, from direct American Practice 50
58. Saxton's Rural Hand Books, 8 vols 3 75
59. Bement's Rabbit Fancier: paper 25 cents, Cloth 50
60. Roemelin's Vine Dresser's Manual 50
61. Neil's Fruit, Flower and Vegetable Gardener's Companion 1 00
62. Brown's American Poultry Yard 1 00
63. Browne's Field Book of Manures 1 25
64. Hooper's Dog and Gun 50
65. Skillful Housewife 25
66. Cherlton's Grade Grower's Guide; paper 50 cts., cloth, 00
67. White's Gardening for the South 1 25
68. Eastwood's Manual for the cultivation of the Cranberry 50
69. Johnson's Dictionary of Modern Gardening 1 50
70. Persoz on the Culture of the Vine 50
71. American Agriculturist, 10 vols 12 50
72. Boussingault's Rural Economy 1 25
73. Thompson's Food of Animals; paper 50 cts., Cloth 75
74. Richardson on Dogs—their Origin, Varieties, &c.; paper 25 cts., cloth, 50
75. Liebig's Familiar Letters to Farmers on Chemistry; paper, 25 cts., cloth, 50

Oct. 1, 1856. 1m.

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BACON'S
MADISON
Mercantile College

Corner of Mifflin and Pinckney Streets,
MADISON, - - - - - WISCONSIN.
Branch of Bacon's Mercantile College, Cincinnati, O.

THE UNDERSIGNED respectfully announces that he has got his new College Edefice completed, the School opened for the reception of Pupils, and all necessary arrangements made for giving a more comprehensive and thorough course of Commercial Instruction than can be obtained in any other school in the Western country—and equal in every respect to the course of instruction given in my old and established College in Cincinnati, Ohio.

The course of Instruction embraces Book Keeping by DOUBLE ENTRY, as adapted to every department of Trade and Commerce; Commercial Calculations, Penmanship, Lectures on Commercial Law, the Science of Accounts, Customs of Merchants, and other Commercial Topics. The plan adopted in teaching combines Practice with Theory, and thus qualifies the student at once for the active duties of the Counting Room.

Students may enter at any time that best suits their convenience. A course can be completed in from six to ten weeks, though the time is unlimited.

TERMS:

For a full Course of Instruction, - - - - $46.00.

☞ For further particulars, address

R. S. BACON, Principal.

MADISON, Wis., Oct. 1, 1856. tf.

ANDRE LEROY'S
NURSERIES,
ANGERS, - - - - FRANCE.

MR. ANDRE LEROY, Member of the principal Horticultural and Agricultural Societies of Europe and America, and lately promoted by the French Emperor to the rank of Knight of the Legion of Honor, for the best nursery products exhibited at the World's Fair held in Paris, begs leave to inform his friends and the public, that he has just published his New Catalogue for 1856, being more extensive and complete than that of any similar establishment on the continent. It contains the prices of all the Fruit, Ornamental and Evergreen Trees, Shrubs, Roses, Camellias, Stocks, Seedlings, &c., &c., with the necessary information for importing the same.

He is experienced in putting up orders for America, and the superior qualities of his Plants have been too well appreciated during a period of 10 years, to require further comment.

The Catalogue can be obtained free of charge, on application to the undersigned Agent, who will also receive and forward the orders. Mr. A. Leroy is happy in being able to state that his nurseries were not reached by the inundation which so recently devastated a portion of the district in which they are situated.

ANDRE LEROY, Angers, France.
F. A. BRUGUIERE, Sole Agent.
133, Pearl Street, New York.

OCTOBER, 1, 1856. 3m.

A RARE CHANCE!
A FARM IN WAUKESHA COUNTY
FOR SALE.

A FARM of 300 acres, in the town of Delafield, situated on that Splendid Road from Waukesha to Delafield. It has a good House and Barn, and is otherwise under good improvements, and will be sold for $4,000 on easy terms. It lies within one hour's ride of M. & M. & M & W Railroads. It is known as the "Kellogg Farm."

For particulars inquire of

J. S. FILLMORE.
No. 2 Juneau Block, Milwaukee, Wis.

OCTOBER 1, 1856. tf.

SPANISH MERINO
SHEEP.

THE SUBSCRIBER has still about 100 of his Sheep left that he wishes to dispose of, as heretofore advertised. These are a choice lot.

D. J. POWERS.

MADISON, Wis., Oct. 1, 1856. 1m.

NEW MILLINERY STORE.

NO. 4, WASHINGTON AVENUE,
MADISON, - - - - - WISCONSIN.

HAVING just returned from the East, with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the Ladies to my newly selected Stock of

Bonnets, Ribbons, Flowers,

and a general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS, and

SILKS AND, CASHMERES,

together with an elegant lot of Dress Goods. Also

YANKEE NOTIONS,

in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis., June, '56. tf.

City Crockery Store.

No. 156 East Water Street, Milwaukee, Wisconsin
M. G. ELMORE & CO.,
Importers and Wholesale and Retail Dealers in China, Glass and Earthen Ware, Lamps, Brittania, and House Furnishing Wares, and Manufacturers of Looking Glasses.

THE Subscribers having recently established a house for the sale of the above Goods in this city, respectfully solicit a call from buyers. We have the Largest Store, the Largest Stock, the Finest Goods, and will sell Lower than Goods have heretofore been sold in this or the Chicago market.

CROCKERY.—Our assortment is unsurpassed—having recently received of our own Importation a large Stock, T. & R. Boote's manufacture and the newest patterns.

CHINA.—Rich, White, Gilt and Decorated, Tea and Dinner Sets—varying in price from $8 to $200.

GLASS.—A large variety, both Cut and Pressed, among which may be found the New Diamond Goods,

LAMPS.—Both Hanging and Stand—for Oil, Camphene and Fluid, new designs.

LOOKING-GLASSES.—From the cheapest to the Best French Plate.

GAS FIXTURES.—The largest assortment of Cornelius, celebrated manufacture. Some very rich patterns, as high as $150 a Chandelier.

TABLE CUTLERY.—Silver Plated, Brittania, Japanned and Planished Tin Wares, In fact, a complete assortment of all the Goods usually kept in a first class Crockery Store.

FANCY GOODS.—We have a Stock formerly comprising the "Temple of Fancy," which we offer At Cost, having bought them to get possession of the Store now occupied by us, and wanting the room now occupied by them for the Crockery Trade.

M. G. ELMORE & CO.

MILWAUKEE, Wis., Sept. 1, 1856. tf.

LANSING BONNEL,
89 & 91 East Water Street, Milwaukee, Wisconsin,
MANUFACTURER OF

THE Celebrated King of Stoves and Forest Oak, (two of the best Stoves ever made.) Also, every variety of Box and Parlor Stove. Tinners Stock, in any quantity. Agent for the sale of Herring's Safes, Fairbank's Scales, and Spratt's Self-Sealing Cans, for preserving in a fresh state Fruits and Vegetables.

☞ Circulars of all the above articles will be sent on application to me.

MILWAUKEE, Sept. 1, 1856. tf.

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Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date,..... $1,874,284 00
Total amount of Premium Notes received,.. 21,500 00
do do Cash Premiums received..... 11,454 00
do number of Policies issued,..... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and Expenses paid to date, 9,871 48

Balance in favor of the Co., Jan. 1, 1856,.... $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to farmers and others wishing Insurance, a safe and reliable Company in which to Insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:

B. F. HOPKINS, *Sec'y* N. W. DEAN, *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS, *V. Pres.*

Directors:

L. J. FARWELL, N. W. DEAN. SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

C. C. OLIN, General Agent.

MADISON, Jan., 1856, tf.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS AND STATIONERY,
BLANK BOOKS, WALL PAPER,
AND FANCY GOODS,
BRUEN'S BLOCK, MADISON, WISCONSIN.
BOOK BINDERY
CONNECTED WITH THIS ESTABLISHMENT.

Book Binding
DONE AT THIS OFFICE.
MAGAZINES, MUSIC AND
Miscellaneous Books Bound on Reasonable Terms.
Blank Books Manufactured.
POWERS & SKINNER.
MADISON, Wis, Aug., 1856.

E. B. CRAWFORD,
FASHIONABLE MERCHANT TAILOR,
KING ST., NEAR THE MADISON HOUSE,
Madison, Wisconsin.

Suffolk Pigs,
OF PURE BLOOD ---- FOR SALE BY
A. G. HANFORD.
WAUKESHA, Wis., Sept. 1, 1856. tf.

A. B. VAN COTT'S
JEWELRY STORE!!
NORTH-EAST CORNER OF
East Water and Wisconsin Streets, Milwaukee.

THIS old and well tried establishment is as new as ever, in its full tide of prosperity. The stock of Goods is new and choice, and the prices so favorable as to make the place a favorite and desirable resort for persons of all ages, sexes and conditions.

The Stock is the largest and most desirable ever brought to the western market. New Goods of our own importation and manufacture, which will be sold to the trade at the lowest New York Jobbing prices.

Jewelers, Merchants and Peddlers, will do well to call before going East or purchasing elsewhere. Among this Stock may be found a full assortment of WATCHES, from the most celebrated manufacturers, together with JEWELRY of every kind of the most fashionable patterns. Also—MASONIC JEWELS and REGALIAS of our own manufacture. Watch Glasses and Materials; also, Watch Maker's Tools, of every variety.

The proprietor is thankful for past favors, and requests a continuance of them

MILWAUKEE, Sept. 1, 1856. tf.

Notice To Stock Breeders.

FOR SALE—The very Superior Imported Durham Bull, "ROTHERSTHORPE," 3 years old, (928 A. H. B., vol. 2 p. 225,) bred by Geo. Falkner, Esq., Rothersthorpe, Northamptonshire, England. Also a pure bred DURHAM BULL CALF, sired by Imported "Rothersthorpe"—Dam, Imported "Diana," also bred by Mr. Falkner, (See A. H. B., vol. 2 p. 350,)

The above animals are of a rich red color, with a little white, and descended from some of the best herds in England.

☞ For Price, Pedigree, or to view the animals, apply to the subscriber, JOHN. P. ROE,

MUSKEGO, Waukesha Co., Wis., Sept. 1, 1856. tf.

Nursery Stock For Sale.

20,000 APPLE GRAFTS, one year, of fair size, embracing 25 of the best varieties —true to name. Price, $30 per thousand 10,000 Buckthorn Plants, for hedges, one year. Price, $5 per 1,000. 10,000 Acacia, (three thorned for hedges,) fine plants, very hardy, 2 years, price $5 per 1,000. Pie Plant, three best varieties, in quantity, from $5 to $25 per 100.

The above will be lifted about the 1st of Nov., or earlier if desired; delivered at the Railroad Depot, in Watertown or Whitewater, if in large quantity.

Orders should be sent in early.

Standard Trees of Apples, &c., in quantity; also Dwarfs and Garden Fruits of all kinds. Fine Evergreens, and large varieties of Ornamental Shrubs, Roses, &c., Root Grafts will be for sale during winter and spring—securely packed for transportation, any time.

Please call and examine, or address

J. C. PLUMB & CO.

LAKE MILLS NURSERY, Wis., Sept. 1, 1856. 3m.

FRUIT TREES.

A CHOICE Collection of Fruit Trees, Shrubs, Vines, Plants, Roses, Dahlias, Evergreens, &c., Cultivated and for Sale by A. G. HANFORD, at his Nursery, Waukesha Co., Wis.

Apple, Pear, Plum and Cherry Trees, Grape Vines, Currants, Gooseberries, Raspberries and Strawberries in variety. Pie Plant and Asparagus Roots. Houghton's Seedling Gooseberry—Antwerps and Franconia Raspberries, in quantity for market planting.

ROSES.—Hybrid China, Prairie, Moss, Hybrid Perpetual, &c. Many beautiful sorts—some of them superb.

☞ Careful selections of Fruits suitable for the Orchard and Garden, will be made by the proprietor when desired. A. G. HANFORD,

WAUKESHA, Wis., Sept. 1, 1856. 3m.

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Madison Agricultural WAREHOUSE.

OF

SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, Keeps constanaly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,

Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " rivoted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " " .

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
At sign of Pad Lock, Morris Street.

apr-tf

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND

MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6×6. 6. to 2.10×7ft., 1¼ & 1⅜ in. thich, two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great ecomomy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade.

STEVENS & DONNEL.

MADISON, Wis., June, '56. tf.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "
Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c. The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. tf

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

TIBBITS & GORDON.

Jan.

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UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1.—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.
COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT, do	do.	2,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf.

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1854. tf.

CLOTHING,

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings—a Beautiful Assortment.

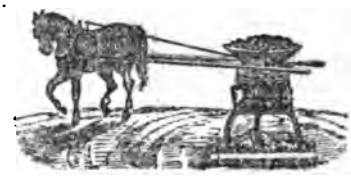
GENTS. CRAVATS

and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, Madison, June, 1854. tf.

IMPROVED LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HENDRE, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 23d of February last. A Committee composed of Gov. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill. It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

Price—No. 2 Complete, $45,00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $55.60, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses. Price, $65.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis., L. A. WINCHESTER, WM. DeWOLF.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

☞ All Communications promptly Attended to. ☜

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SPLENDID FARM,

FOR SALE.

A FARM embracing 100 acres of superior Land, with several varieties of the best kinds of soils—about 40 acres under fence and plow, with about 10 acres of good mowing land—the balance timber and openings—lying half a mile from the city limits of Madison, and nearly three miles from the State House and Capitol Park, on Wyseora Creek.

The *Buildings* on it are convenient and comfortable—consisting of a good frame House, cellar, wood-house—a substantial frame Barn, Horse-stables, Cattle-sheds, Hen-house, a good log house, and other necessary out-buildings—with a good well, several fine springs, and a living Creek running through the whole length of the Farm, affording excellent water for stock on different parts of it, with plenty of excellent fish in it.

There is also, on the place, a large *bearing Orchard* of choice grafted Apple Trees, besides other fruit, with abundance of Strawberries, Raspberries, Currants, &c.

In short, there is no better or more pleasant farm in the country—with every convenience for an immediate comfortable *Home*, for a good family of means and stock. Possession can be had at once, or in October, as may best suit the purchaser.

The present owner is entirely suited and pleased with the place, and would be glad to keep it for a constant home; but his pecuniary circumstances will not warrant his keeping so valuable a Farm, and therefore he desires to *sell it soon*, to some one more able to own and enjoy it than himself.

The *price* is one hundred and ten dollars ($110) per acre, one third down, and the balance on time of three or four years: which is well known, by all acquainted with the place, to be very low, for one of such good improvements and advantageous location, as this farm possesses.

One half, or the whole, will be sold, as shall be desired by the purchaser. Enquiries may be made at the WISCONSIN FARMER Office.

P. S.—Horses, Cows, Tools, and the Crops on the ground, will be sold with the farm, if desired.

MADISON, July, 1856. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,

AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

any house West of New York.

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.

MILWAUKEE, May 1, 1856. tf.

SEACOR OR LAWTON

BLACKBERRY.

THE Undersigned would inform the public, that he will have a choice lot of the above Celebrated Blackberry Roots for sale, about the first of October next, coming so direct from their original source, as to leave no doubt of their genuineness. They are undoubtedly the best Blackberry in the world, combining all the desirable qualities of large size, fine flavor, prolific bearing, great hardiness, and Easy Cultivation. We shall be able to furnish them individually, or by the dozen.

Price—40 cents each, or $6 per dozen.

We will forward them, securely packed by mail, to those sending orders enclosing the money.

JAMES L. TOWNSEND.

CAMBRIDGE, Dane Co., Wis., Sept. 1, 1856. tf.

H. B. MERRILL & Co.,

(SUCCESSORS TO COBB & MERRILL.)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's wear, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c,

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishment the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

Jy'56tf. No 3, FAIRCHILD'S BLOCK, MADISON, WIS.

LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

A HOME

FOR INVALIDS AND THEIR FRIENDS,

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor R. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

Terms for board and treatment, $9 to $12 per week. Excellent stabling and carriage room is provided for those who wish to keep their own conveyance. Circulars sent on application.

Address R. A. KITTREDGE, M. D.

Lake Side Water-Cure, Madison Wis.

July 1, 1856, tf.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. R. POWERS.

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COOK & BELDEN,

Capital House Block, Madison, Wis.,

Have constantly on hand a complete Assortment of

Watches, Jewelry,

PURE SILVER AND PLATED WARE,

FANCY GOODS, CLOCKS, &C.

All Goods warranted as represented or money refunded. Silver Work bought at our store is engraved free of charge. Watches and Jewelry Repaired and Warranted, by *Experienced Workmen.* tf.

MADISON, August, 1856.

1856.] MILWAUKEE [1856.

STOVE STORE,

ISAAC BONNEL—AGENT,

Wholesale and Retail Dealer in Stoves, Tin and Japanned Ware, and Agent for

Herring's Champion Safes,

FAIRBANK'S PATENT SCALES,

WAREHOUSE TRUCKS,

Cistern and Well Pumps, Corn Shellers, Clothes Horse Castings, Flat Iron Heaters, Charcoal Furnaces, Robinson's Patent Double-Acting Downward Draft Gridiron, &c., &c. Also Manufacturers of

Tin, Sheet Iron, Copper & Zinc Ware.

JOB WORK

Of every description done at short notice, and on the most reasonable terms.

MORRIS STREET, NEAR CAPITAL HOUSE, MADISON, WIS.

N. B.—Goods sold at Milwaukee prices, adding transportation. Terms Cash.

MADISON, Wis., Aug. 1, 1856. tf.

MENDOTA NURSERY.

A MILE AND A HALF WEST OF THE *STATE UNIVERSITY.*

TREES, SHRUBS, VINES &C., &C.

H. F. BOND.

MADISON, Wis., Aug., 1856. tf.

RANDALL & JONES'

PATENT DOUBLE HAND

Planting Machines.

J. HERVA JONES, Inventor and Proprietor of the Patent for New York, Michigan, Wisconsin, Minnesota, and Northern Illinois,

OVER THIRTY First Premiums awarded—and over Fifty Thousand Acres of Land planted with them in 1855! Twenty Acres of corn have been planted by one man with one of them, in one day! I challenge any mar, with any implement whatever, to a trial test—either on Time, Quality, or Expense of Planting. I will give any person *Five Thousand Dollars* who will produce its superior. I have cuts and descriptions of a

NEW MARKER,

my own invention, which will save much labor in cultivating, and which I will mail free to all who purchase my Planters.

Rights and Machines for sale. Send for a Circular.

J. HERVA JONES.

ROCKTON, Winnebago Co., Illinois. Apr. tf.

FURNITURE!

1856! 1856!

O. C. BUCK & CO.,

MANUFACTURERS AND DEALERS IN

Cabinet and Upholstery.

Rooms on Washington Avenue, East of the American Hotel, and on Morris Street, near the Court House, Madison, Wis.

KEEP constantly on hand everything wanted in the Furnishing line. Buying all our Goods in the Eastern market, we can of course sell cheaper than establishments purchasing of Western Jobbers.

Beds and Bedding,

Of all kinds and qualities. Mattrasses, Hair, Excelsior, Husk and Sea Grass. Take your choice and we can suit all tastes.

SOFAS, CHAIRS, CENTRE-TABLES, BEDSTEADS LOUNGES, WARDROBES, BUREAUX, SIDE-BOARDS, LOOKING GLASSES, &C., &C.

Together with innumerable articles too small and numerous to mention, and too useful to be overlooked. We are now prepared to supply orders at wholesale as well as retail as heretofore. Country merchants will take notice.

Look out for the Big sign on Washington Avenue, East of the American Hotel

O. C. BUCK,
WM. HAWLEY,
C. C. CHURCH.

MADISON, August 1, 1856. tf.

Boston Boot and Shoe STORE.

Magnificent Stock and New Arrangements.

HAVING purchased the magnificent stock of Boots and Shoes of Willis, Neil & Co., I am now prepared to offer to the people of Madison and vicinity, an extensive assortment of custom made work, from the Best Manufacturer in the East, and at Eastern Prices. My motto is, "Low Prices, Small Profits, and Quick Sales." For the Ladies, Misses and Children, my assortment of Boots, Gaiters, Buskins and Slippers, of every variety and style, both quality and price, is not equalled in the West. For the Gentlemen, Boys and Youths, I have almost everything worn or called for; every style and variety of *Boots, Congress Gaiter,—Oxford, French and Jersey Ties*—and a great variety of Boots and Shoes which, for style, quality and price, cannot fail to please everybody.

At Curtis' old Stand, Near the Capital House.

D. M. BURWELL.

MADISON, Wis., Aug. 1, 1856. tf.

Madison Plow Factory,

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel Plows, and we feel confident that their equal cannot be found East or West, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

We would also call your attention to our Breaking Plows, which we sell cheaper than any plows of the kind offered in this market.

☞ TIBBITS & GORDON are the only agents in Madison.

C. H. BILLINGS. S. H. CARMAN.

MADISON, Feb. 1, 1856. tf.

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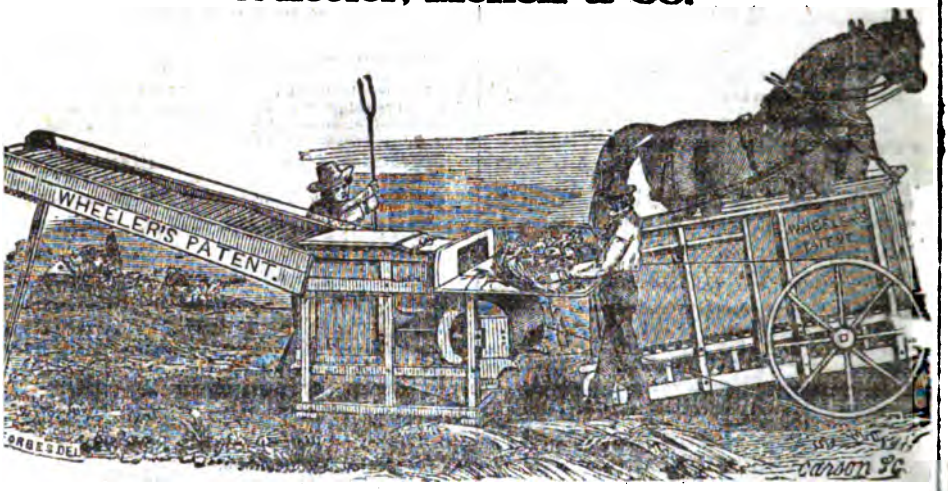
NEW YORK STATE AGRICULTURAL WORKS,

BY

Wheeler, Melick & Co.



[*Double Power Combined Thresher and Winnower.*]

We are Manufacturers of Endless Chain Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable machines.

Wheeler's Patent Single Horse Power,

AND

OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers It separates grain and chaff from the straw, and threshes about one hundred bushels of Wheat, or twice as many of Oats per day, without changing horses—by a change nearly double the quantity may be threshed. **Price, $128.**

WHEELER'S PATENT DOUBLE HORSE POWER AND OVERSHOT

THRESHER WITH VIBRATING SEPARATOR,

This Machine is like the preceding, but larger and for two horses. It does double the work of the single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of Threshing. **Price, $160.**

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Albany, N. Y.

MAY, 1, 1856. tf.

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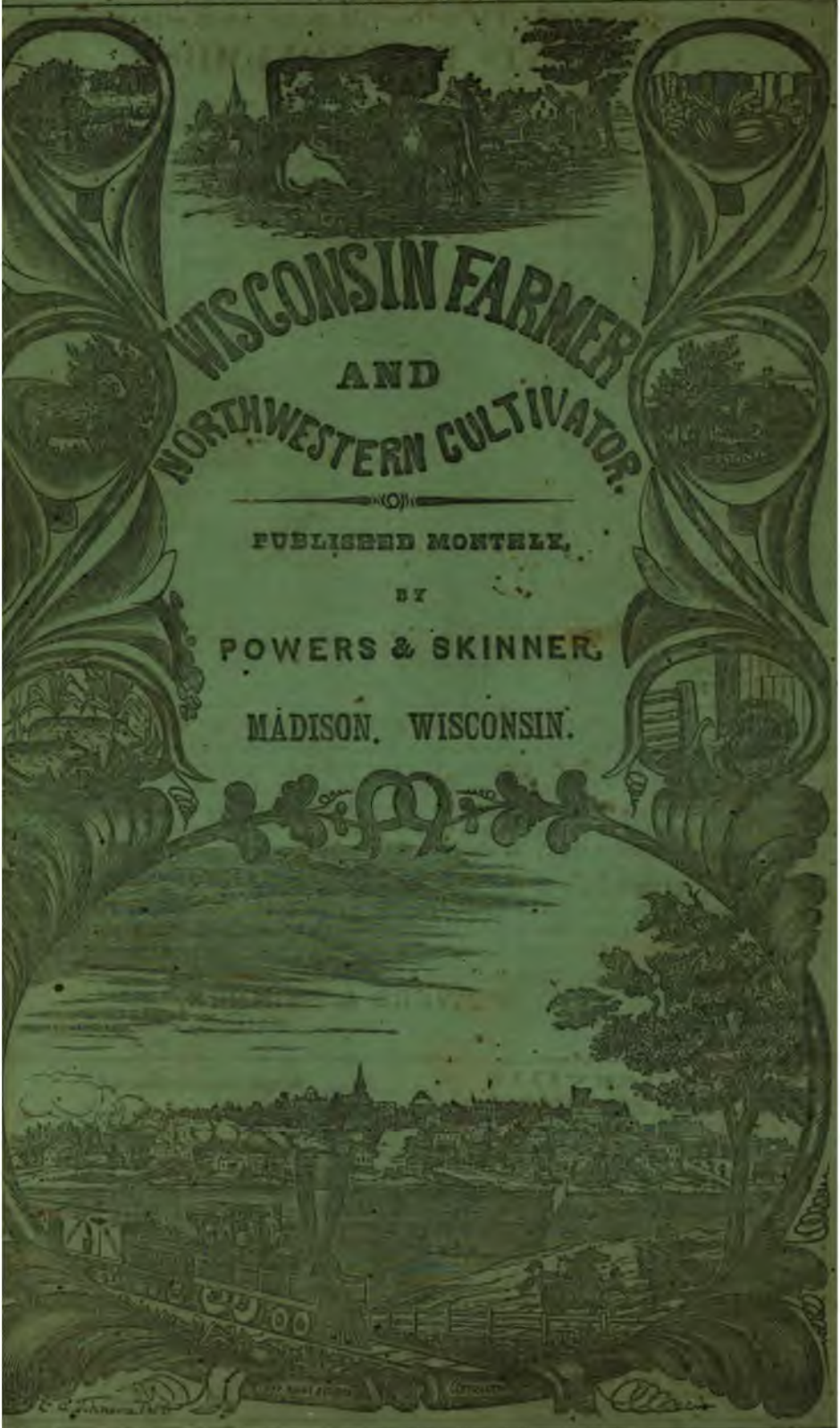

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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POSTAGE—PRE-PAID AT THE OFFICE OF DELIVERY—12 CTS. PER YEAR TO ANY PART OF THE U. S.

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A limited number of advertisements will be inserted in the *Farmer* at the following rates: 1 square, (of 12 lines or less) first insertion, $3. Each subsequent insertion, $2.—One page, one insertion, $20. By the year, $120. All transient advertisements to be paid in advance.

BACK NUMBERS in abundance for new subscribers. Clubs and agents are requested to hurry in their lists as early as may be, and as large as possible. This number of the FARMER is sent to some persons who are not subscribers, with the hope that they will like the work and subscribe for it.

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MADISON, WISCONSIN.

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Janesville

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—AND—

SEED STORE.

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Corner of Milwaukee and River Streets, west side of the river.

JANESVILLE Aug., 1856. tf.

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WISCONSIN FARMER,

AND

NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., NOVEMBER, 1856. NO. 11.

SUGGESTIONS FOR NOVEMBER.

Oh, Autumn! why so soon
Depart the hues that make thy forests glad;
Thy gentle wind and thy fair sunny noon,
And leave thee wild and sad!
Ah! 't were a lot too blest
For ever in thy color'd shades to stray;
Amid the kisses of the soft southwest
To rove and dream for aye. [*Bryant's Poems.*

November is the last of the Autumn months, not only by the almanac, but usually in fact. Though usually interspersed with some pleasant weather, but more generally rough, cold and stormy; presenting at best but a poor chance for doing up many kinds of out-door work, that should have been done during the more mild and genial "Indian Summer" days of October. But we will take it for granted, that everybody has got each department of his farm work along in season, so that nothing now remains to be done, but what is adapted to the season, and can be managed to advantage, even though it is a little cold and bleak.

For instance, it is an excellent time to prosecute fall plowing, until the ground actually freezes. Recollect that every acre well plowed in the fall, may prove worth five dollars to next year's crops; besides saving time in the Spring. "Speed the plow" then, as long as possible, and as as deep as practicable. And when the plow will not speed any longer, for want of field room, or on account of frost, then speed the manure out of the yard, and away from all the out-buildings, slick and clean, before the new crops of hay and weed seeds are scattered among it.

If you have any newly seeded grass lands, put a good coat of manure upon them if you possibly can. You will find it doubling the product of hay the first year, if put on the fall before. There is no greater mistake that Western farmers have fallen into, than that manure is no particular object, ordinarily, upon our rich new lands. Its application to all hoed crops,(except beans perhaps,) and to grass lands, will invariably be found to pay largely for the outlay. It is a fact when the truth is told, that we do not generally raise more than half to two-thirds of a crop of anything in this country, notwithstanding the virgin richness of our soil. Some may think this a wild statement, but nevertheless we know it is true, as a general rule, of all our crops.

For instance, take wheat, our leading crop, and as an average all through the State, one year with another, we do not exceed 16 bushels to the acre. Still, who doubts that good thorough tillage, and the drilling in of clean seed in a sufficient quantity, and deeply rolling the ground to finish up, would just as uniformly grow 25 bushels to the acre.

Then as to corn, the same may be said. Our richest lands, if well coated with manure, and the whole worked thoroughly and deeply into the soil, and the corn planted of good seed, and thoroughly and well tilled all through to the harvest; allowing no weeds to grow over two inches high, will yield 75 to 80 bushels, just as surely as the present shabby system of tillage yields from 30 to 40 bushels per acre. The same may be said of every other crop, through the whole list of farm and garden products, except weeds, which seem to have a knack of growing on their own hook. It is as true here as elsewhere, and now as ever before, that manure is the farmer's best capital; and it should be husbanded accordingly, no mistake about it.

When the manure is all out, and the yards clean and tidy for the new straw bed for the cattle, then turn your attention to the cutting and preparing of wood for winter; it is much easier cutting up, down timber, and piling up all the litter and brush, before there is any snow in the way, than after. Cut and pile the wood now, and when the snow comes you can haul it right along without delay or unpleasantness. The beauty of all work is taking it by the foretop; and the

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unpleasantry and loss comes from being behind hand. . . . . .

If the cellar is not already sufficiently banked up, and also the fruit trees, it is time they were. Then if you have buried potatoes, see that it is so well done, that they will not freeze, nor heat either—one extreme being almost as bad as the other, and both difficult to avoid, for the reason that some winters are so much colder than others.

Burying potatoes, strikes us as at best a poor way of keeping them; but many can do no better at first. In doing it, care should be taken not to put them so low in the ground as to cause the water during after storms to settle around and dampen them. A good coating of straw under, around and about them, before putting on the dirt, is one of the best safeguards from moisture, and from cold. A raised bank of earth will take the frost through almost any depth; but an inner and ample lining of straw contains so much air as to make it a poor conductor, and consequently it intercepts the frost.

Care must be taken in burying turnips, not to put them in too large heaps, as they are much inclined to heat, and spoil. They are much inclined to sweat, and consequently when they are covered, they should have air-holes left in the top of the covering. These can be filled with a wisp of straw, until right cold weather, when more covering can be put on. Many bury turnips in long ranges, instead of round piles. On the whole we think it the best way. They are much more difficult to keep than carrots or beets, and are not worth near as much when kept. Still, whatever root crops you have, take good care to secure them well.

District Schools, among other things, are usually starting off about this season of the year, and call for special attention. If you are a district officer, ask yourself if you are doing your whole duty as thoroughly as you know how. Have you carefully inspected the school-house in all its departments, to ascertain whether it is in a fit condition for winter use? Are the windows not only all mended but tight and carefully cased to keep them from rattling, or letting in the cold? Is the building well banked outside, and a good large platform at the door on which to stamp off the dirt before entering? Then the outside door, is that rigged with listing, and a light easy latch, so that it will open and shut without noise? Then about the seats and benches inside—are they easy, tidy and neat? If so, all right; but if not, see that they are all put so before using.

The setting up of the stove in such a manner as to best warm the room, and at the same time not roast the little boys and girls that sit next to it, is quite a desideratum. Then again, if the room is as low in the ceiling as many we have seen, we would urge the indispensable importance of some species of ventilation up through it. It is far better than dropping the top sash of the windows, as that lets in the gusty, cold winds from without.

When the house is in order, the next thing is the teacher; and the importance of having a good one all understand—but what constitutes a good one may be a matter of more difference of opinion, and one that we will not stop to discuss. If you would have a good school, after all the aforesaid provisions are made, there is still one more important thing to be attended to, and that is to frequently visit the school, and encourage the scholars and teacher, by showing them that you take a lively interest in their welfare and progress. This is the most essential thing of all; and we would ask our kind readers, male and female, how many of you are doing it? We fear not a large number, judging from our past observation.

In conclusion on this subject, we would say to all who have children in school, to keep a careful eye to the matter; and instead of listening to mean, idle rumors about the school or teacher, to visit it personally and often, and form your own opinion as to its merits and management. That is the only right way. As to text books, don't believe more than half that agents claim as the merits of their respective publications. School Book making, like everything else, has become a trade and speculation, and is drove about as hard as the Patent Medicine business. It is a silly trick of some teachers to be eternally shifting books, seemingly and merely for the sake of something new. When necessary, nothing could be more proper; but when the result of a whim, or to aid the booksellers, it is, to say the least, highly reprehensible. By and by, we will again

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ask our readers, if they have visited the school during the winter, and hope they will be able to answer in the affirmative.

For the Farmer.

AWAY AMONG THE TALL TIMBER.

MESSRS. EDITORS—Perhaps a few facts in relation to this remote corner of our new State and its business, may not be uninteresting to some of your readers. Menomonee is better known hereabouts as Wilson's Mills. It is probably the locality of the largest lumbering establishment in the State—situated on the Menomonee or Red Cedar River, a large and powerful mill stream about the size of Rock River above the Crawfish, with a fall of at least sixteen feet, that operates the extensive mills of Knapp, Stout & Co., (called Wilson's Mills.)

These mills run two complete gangs of saws, that cut up entire logs one after another, with a speed and power that is surprising, besides single upright saws, circulars and rotaries without number—altogether employing a force of nearly three hundred men, in all the various departments of the business. The big old pines of many centuries growth quail before their united action, and fly like chaff before the wind.

The establishment resembles one vast bee hive, excepting the fact that the *bees* have on red instead of yellow jackets. Some are hauling in logs, some are sawing, some slitting, some carrying away and others cribbing up for rafting. Every one seems to know his place and move in it, like clock work. Altogether they average some 80,000 feet of lumber per day, or in the aggregate some 20,000,000 feet per year. This vast amount gives some vague idea of the immense business done by this company, and when the reader considers that all of these results are effected away in the solitudes of a new country, far from settlements and supplies of any kind, except pine forests and tumbling waters, he is necessarily the more surprised.

Menomonee is situated on the road from the mouth of the Eau Clare to Hudson, being about 25 miles from the former and 50 from the latter place. On this road, which appears to be almost the only one in this region of country, there is now and then a scattering settler; otherwise the country on all hands is almost a blank, and nearly as desolate and wild as it well could be. A belt of heavy mixed timber stretches westward towards Hudson, for 26 miles, and 20 of it without a house.

Such is the situation and surroundings of this gigantic lumber manufactory—this devourer of forests. Hence to support so many men and the requisite teams, they are compelled into farming also on their own account. Luckily for them there is a fine farming country on the east side of the stream, and they are turning a large tract of it into well tilled fields. Their various buildings, offices, stores, boarding-houses, shops, &c., &c., constitute a little town of their own, perfect in all its parts, and to all appearance independent of all outsiders.

The whole establishment presents a striking illustration of the power of mind and muscle over matter, when well and perseveringly directed. Here these men, humble and comparatively poor, commenced their labors some ten years since, without any companions but the Indian and the beaver—the bear, the wolf and the elk.

Their first product was a small cheap mill, of no pretentions; but it was the entering wedge and the root from whence all the rest have sprung. Each succeeding year has added to their wealth, strength and capability, until now perhaps they stand foremost, and are the largest manufacturing company in the State, of any kind, sending infinities of lumber in all its shapes, to thousands of industrious settlers all down the great rivers, and pocketing a cool $100,000 per annum, as the profits of a great, well directed and useful business. How different the employment of those who seize upon the rough forests and turn them to such a useful account, and those who sieze upon the ripened harvest, and turn its golden grain to liquid fire. Surely they will have a very different account to settle in the great High Court of final judgment.

But, better than all, this whole concern is carried on without whiskey, or liquor of any kind—it not being suffered on the premises. The consequence, as might naturally be supposed, is that quiet and good order prevails without interruption. The laborer saves his money, and pettifoggers and small beer officers have nothing to do.

A mile and a half below is Gilbert's Mills,

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and a few miles above is Northrop's Camp. The latter is entirely alone in the wilderness and the former about the same, notwithstanding their recent celebrity as populous places, judging from their votes.

Doubtless a Railroad will ere long wind its snake-like curvatures through these shady vales and Sunday-like solitudes, peopling them with active life, and inspiring all with a new order of being.

MENOMONEE, Dunn Co., Wis., Sept. 9, '56.

ROTATION OF CROPS.

A proper rotation of crops is very difficult to obtain, and of high importance to the farmer. A rotation adapted to one section may be entirely injudicious for another. It should be particularly adapted to the place where it is employed, so as to suit the soil, the climate and the market. As these will vary in different localities, the farmer should exercise his judgment in arranging the rotation so as to secure the best means of enriching the farm, and take that course which will yield the most profitable returns for his labor. To obtain these results, the first principles upon which rotations are based should be brought into the account.

One principle never to be overlooked is, that every plant exhausts certain constituents of the soil on which it grows. Every plant obtains a part of its support from the soil and a part from the atmosphere; and hence every crop diminishes the fertility of the soil where the plant is removed from the field. But if allowed to remain on the soil they enrich it, for all that they abstract from the soil, with all they draw from the atmosphere, is given back again; and hence the noted fertility of lands on which the accumulated succession of vegetables have decayed during many years. But on the farm, the crop is generally removed, and hence the necessity of making a return by manuring, to prevent sterility. By constantly cropping the most fertile fields will become unproductive and barren. In this way, most lands become unprofitable in a few years. Again: Different plants do not take from the soil the same elements; and hence a succession of the same crop must soon deprive the soil of certain parts which are essential to its growth, and it must languish, while some other crop, requiring different food, would flourish luxuriantly.

Nor should the farmer overlook the fact that some plants favor the growth of certain kinds of weeds more than others; chess and cockle flourish with wheat. Weeds peculiar to a particular crop multiply greatly when that crop is raised on the same land for many successive years. The same is also true in regard to certain kinds of destructive insects. The Hessian fly and the weevil pursue the wheat crop. The wireworm and the grub make their choice among the crops of the farmer, and multiply rapidly with a succession of what they have chosen.

Every farmer knows that some crops admit of a heavier application of manure than others. Broad-leaved succulent plants admit of abundance of manure. Corn, beets, and turnips are of this class; likewise grass for meadows and pasture, with most plants whose value depends mainly on the quantity of green growth. But the crops of smaller grain, such as barley, wheat and rye, may be so heavily manured as to cause a too luxuriant growth of straw at the expense of the grain. For this reason, in a rotation, the manure should be applied to such as are immediately benefitted by a larger application. Corn and oats will derive more benefit from manure less decayed than wheat requires. A field heavily manured in the spring with manure made in the barn-yard during the winter, will produce a larger crop of corn or oats, and the next season yield as large a crop of spring wheat, as it would had the manure been piled in the yard through one summer and then spread on the field for wheat. The manure should always be put on the field as soon as may be after breaking up the sward, that it may be thoroughly spread and mixed with the soil. This item is of no little importance, for, by leaving fresh manure in bunches, unmixed with the soil, it yields little benefit to the plants, and by increasing the drought, it has diminished instead of increased the crop.

Farming, wisely conducted, is a continued succession of exhaustion and replenishing. The best method of replenishing the land should, in all rotations, be regarded as the leading object. The crop which brings the most money is not always the best. Not a few look only to immediate profit, and their management of the soil perfectly harmonizes with this one idea. Future fertility is disregarded; everything possible is taken from the field, and nothing returned to it—nothing done to restore its wasted energies—nothing to check the progress of exhaustion. If the farm, when new, was rich and fertile, it soon becomes barren and sterile, and the misguided occupant is ready to abandon the desolation which his improvidence has spread around him, and seek more fertile lands in a new country.

That these evils may all be avoided is certain, if a rotation of cropping can be secured, which shall afford a sufficient change in the draft made by the plants on the different elements of fertility in the soil, and which shall return to the soil as great a proportion of organic matter in manure as is taken from it. Of late years, it has been proved by

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many skillful farmers, that by the application of manures produced on the farm only, there has been a constant increase of fertility.

In forming a rotation, a number of particulars should be carefully considered:—1. To exhaust the soil the least that can be done. 2. Restore back to the soil as much manure as practicable. 3. Take that course which will best prepare the field for a future crop. 4. Prevent, as far as possible, the growth of weeds and the increase of insects. 5. Adapt the application of manure to the respective requirements of the different crops which are to follow. 6. Select the several crops so as to adapt them to soil, climate and market.

For a three years' course, the following is found to do well:—First year—Corn, well manured. Second year—Wheat. Third year—Clover.

This rotation brings round a return of the same crop so frequently, that there will be danger of exhausting instead of increasing the fertility of the soil. A more extended rotation, like the following, would be preferable: First year—Corn, oats and roots, with plenty of manure. Second year—Barley, or peas, or both. Third year—Wheat. Fourth year—Clover, for two or three years.

It is needless to furnish specific examples of rotation. The principles above laid down will enable the cultivator to vary the crops for rotation as circumstances require. The more the subject is examined, the more deeply interesting will its investigation and application appear. A rotation, the same as given above, has tripled the products of many farms; and some, which were exhausted and abandoned, it has restored to fertility rivalling the rich districts of virgin soil. Let the farmer carefully examine the subject of rotation, exercise his judgment in its practical application, and he will guide his operations with precision and with increased profit.

That the farms will not now produce such abundant crops of wheat as they were accustomed to yield, has of late become the common complaint of agriculturists in the Northern and Eastern States. This complaint is well founded—it is the language of fact. While the great mass consider this fact mysterious and inexplicable, it is one of the most obvious things in the world. It is the natural result of the negligent method of farming that has done it. The fields have been cropped without being replenished, till they are exhausted. There is no more propriety in this complaint than there would be in the case of the man who should complain that his team would not work while he neglected to feed them. Feed the team properly and fully, and it will work. Feed the field and subject it to a judicious rotation, and it will produce more than its former abundance. The same field may be constantly cropped, and yet constantly enriched with the refuse of its own productions. Let farmers perform their part faithfully, and there will be no worn-out lands as long as the world stands.

[Tenn. Farmer and Mechanic.

NATIONAL AGRICULTURAL DEPARTMENT.

In the last number of the Maine Farmer we find the following:

We are glad occasionally to hear from the different sections of the nation in regard to the necessity of having a department of agriculture connected with our government at Washington. It is a disgrace to us, as a nation, that we have nothing nearer to it than what is appended to the Patent-Office.

At a recent "Guano Convention," held at Washington, various plans were recommended for inducing the Peruvian Government to change their system of trade in regard to the article of guano, so that it may be made to come to the consumer. It seems that as at present managed, a few make a monopoly of it, and charge most exorbitantly for it, when delivered in the United States.

In the course of the discussion, which we find reported in the American Farmer, Mr. Calvert made the following remarks. They are just, and speak the opinion and sentiments of very many who have considered the necessity of a department of agriculture:

"What we most want, is a Cabinet Minister, presiding over a department of Agriculture. Nobody had ever attempted to offer any but unconstitutional objections to such a measure, and all such objections were to be repudiated. Congress ought not to be the sole arbiter of what is and is not constitutional. When Congress wanted to do anything, they never troubled themselves as to whether it was constitutional or not.

"He would like to know where the constitutionality of getting California, Frorida, &c,, could be found. Then there was Denmark and the Sound dues; nobody rises in Congress to question the constitutionality of coercion in that case. But the moment agriculture asks anything, there are constitutional scruples in the way; it cannot be done. Now, it is high time that this thing be stopped. Congressmen are rightfully not our masters, but our servants, and if farmers choose they can make them so really. We hear now-a-days a great deal about 'platforms;' it is high time to have an agricultural platform. Farmers do not want office for themselves, but they should take care to give no office to politicians until they pledge themselves to give us what we want. Under the combined influence of

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city life and commercial pursuits, the nation is beginning to wane, and nothing can restore it but a restoration to the agricultural community of its proper weight in the policy and legislation of the country. In the country we have no '*isms*,' no unhealthy agitations, and on the rural population must rest our final hopes of national security. Notwithstanding all this, the interests of every other class are consulted and cared for, and the farmer alone is put off with 'unconstitutional scruples.' "

We are glad to see that the agricultural papers are taking up this subject. We hope they will discuss it at large. If it is unconstitutional that our government should take thought for the agricultural and mechanical interests of this great nation, let us make it constitutional. But it is not unconstitutional. Mr. Calvert says, "Farmers do not want office for themselves." We incline to the opinion that he is right. The farmers are undoubtedly a very modest class, too much so, we fear, for the true interests of the country. Whether they want offices or not, we cannot see why they should not have them. The public good requires that all classes should be represented in the government. If any class is to be excluded, the farmers are the very last on whom the exclusion should fall, and the mechanics next. Massachusetts, New York, Virginia, and, perhaps, every State in the Union, have farmers of worth, intelligence, high honor, who would grace our halls of legislation, would attend to the nation's wants, and not be spitting froth and cold lead at each other. The farmers do not want office; that is true; but the country wants their service; and when her halls of legislation are filled from all classes, and not from one—when farmers, mechanics, manufacturers, merchants, doctors, teachers, clergymen and lawyers, in due proportion, are sent to make and execute the laws—then the laws will be better made and better enforced, and we shall at least have more decency in our halls of legislation. [Plow, Loom and Anvil.

We think many of the suggestions in the foregoing article apply well to our latitude, as well as to the East. Politics is made too much a trade with us, and political leaders, too, often turn demagogues. The people at large, and especially the farmers, are too much inclined to think that they have little or no interest in political matters, except merely to vote at elections, and often hardly that. This is a grand mistake for a community of at least three-fourths farmers, representing as they do almost the entire interest and wealth of the country.

What is the natural result of such a stupidity and negligence in governmental affairs? It is as natural as anything else, that mere selfish idlers and unprincipled men contrive to control the primary meetings, and wriggle their way into office, against the manifest judgment and good sense of the better but careless portion of community. In this way men often get into office and have the handling of the property, character, and liberties even, of the whole community, whom individuals would not trust with a single dollar. It is sufficient that they are nominated; they must have the party vote. Many seem to think it better for the State to sink than the party. But, what nonsense! and what is the natural result of it? Why, simply that we see our legislatures made up of mere demagogues and idle professional men, who actually have no business to do at home—where together they spend their time and the people's money from month to month, in mere "log-rolling," to pass local and swindling laws, that are usually but a curse to community. Thousands on thousands are spent on worthless printing, in worthless debating and in divers worthless steals and wastes. And what of all the money that is spent goes for the good of the farmer who pays most of it in taxes. Mighty little, indeed. If a bill is got up by some farmer, or friend of the farmer, that happens to be of the body, to appropriate a few hundreds or thousands to any agricultural enterprise, there is a perfect howl at once raised over it, and it is branded a waste and steal by the professional theives, who cannot bear to see anything go where it will escape their pockets, or fail to subserve some party end. Now, this is true, and every observant man knows it. Even here in our own State, we have been continually robbed as a people, ever since we had a government, and very little has been done, and that grudgingly, for the promotion of the great agricultural interests of the State. But the remedy, as we said in the outset, lies in the hands of the people at large, and in the farming and rural districts. If they would fully wake up to a sense of their interests, and attend to them by nominating and electing good sound, safe men to office, and no other, despite all party names and clap-trap humbugs, and set their faces

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like flints against loafers and irresponsible whiskey drinking idlers, never allowing them to be elected to office, any more than they would take them in as business partners, how soon would the whole difficulty be cured. Then we would see short sessions of Legislatures, groggeries and gambling holes shut up for want of custom, simple and intelligent laws enacted, and low taxes, and these desirable things will never be seen till then. EDS.

THE LABORING MAN.

BY CLARA AUGUSTA.

Blest be the lab'ring man,
Who works with ready hand,
Content to sow, to reap and mow,
And plow the barren land!
To fertilize the plain,
And make the desert bloom—
To plant the golden wheat and rye,
Where erst was swampy gloom;
Through joy and sorrow here in life's short span,
My prayer shall be, God keep the lab'ring man!

Blest be his rough, hard hands,
Bunbrowned with toil!
I love them, for they till
My country's soil!
Blest be his brave true heart,
Though silken vest,
And chains of jewelled gold
Fold not his breast!
The foremost form in Liberty's proud van,
Earnest and true. God bless the lab'ring man!

* * * * * * * * *

The brave, strong sons of truth,
Defenders of the frail,
Oh, let their noble deeds be borne
Abroad by every gale.
Their faith and trust in Heaven,
Their standards raised on high,
Until the gorgeous upper folds,
Are lost in ether sky!
Through joy and sorrow here, in life's short span,
My prayer shall be, God bless the lab'ring man!

For the Farmer.

FROM MINNESOTA.

MESSRS. EDITORS—Though Minnesota has many rich blessings this year, yet want of rain and abundance of grasshoppers have very much shortened our hitherto abundant crops in some parts of the Territory.

The last of August a small party of us took a trip forty miles up the river, to Monticello—a few miles above St. Anthony. We met the grasshoppers making their way down the river, hundreds of them starting up at every step of the horses, and the wheels crushing scores at every revolution. It was really a sad sight in the fields—the corn was stripped of every leaf, as also were the potatoes, and looked as if they had passed thro' a very hard winter; stumps of cabbage looked as if beheaded with a knife; squashes and melons in some yards had only the bare vines and fruit left; turnips were entirely destroyed; other root crops were eaten off close to the ground. But the farmers seemed no way discouraged—on every hand where a farm was commenced, fencing, building and plowing were going forward. A great portion of the land on the east side of the Mississippi between these two places, is owned by speculators, who are waiting to have it enhanced in value by the improvements of the hardy settler, who has to push on many weary miles across these fine fertile openings and prairies, remote from market and back from the river. It does seem too bad that so much beautiful land should be unoccupied, while the legal owner, like a greedy spider, sits idly in a corner of his far stretching web, watching the toil of others to fatten upon it.

I never knew before what a luxury wild fruit was. The crop this year has been very great. We have all the varieties of plums, growing spontaneously, that any fruit grower can produce, and also grapes, though smaller in size. Our Catawba grapes produced a few clusters this year, though only two years from the slip, and wholly unprotected during the winter. M.

MINNEAPOLIS, Sept. 30, 1856.

For the Farmer.

THE IMMENSE CONSUMPTION OF WOOD.

MESSRS. EDITORS—In past numbers of your paper the subject of the consumption and and supply of wood, has been discussed, and it is one of great importance to land owners—deserving their prompt and earnest consideration, as the land is the only foundation from which it can be produced. And it would seem to be a positive duty of every reflecting and inventive mind, to exert his wisdom in preventing the frightful scarcity which may come upon our country.

Some wise and timely suggestion may arise in reading and weighing the following statements from the Chicago Democrat:

"Mr. McCallum, Superintendent of the New York and Erie Railroad, has recently presented a thorough and able report on the working of the road under his supervision. From this it appears that the cost of fuel on the New York and Erie—which runs for much of its length through a thickly wooded country—is 88-100 per cent. for each ton drawn, per mile. No less than 10,082 cords

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of wood were consumed during the month of July, in running 287,587 miles. At this rate, the number of cords consumed during the year will amount to 120,384, or a pile 182 miles long, four feet high and five feet broad! What, then, must be the aggregate havoc made in our forests by that insatiable devourer, the locomotive, and how long will it take to shave the country as clean as a state-prison convict's poll? No wonder that wood is so awfully high as to prevent its use by any but the wealthy. The inventive genius of the country should be exerted to furnish an economical and adequate substitute for the wood burning furnace, in an apapratus adapted to coal. Several such have already been tried, but for some reason have not been generally introduced."

Two modes must be resorted to, that is—to increase the amount of growing timber, and to find out sufficient substitutes; but how to effect these two things most extensively is the question. D. S. C.

TO ASCERTAIN THE WEIGHT OF HAY BY MEASUREMENT

We observe a statement going the rounds in some of the agricultural journals, that one hundred feet of hay in a stack or mow make a ton!! In a work, published some years ago, we think the author said 268 cubical feet of hay in a mow, which had become well settled, make a ton. "Hay in a field-rick," says Low, "weighs something better than 112 lbs. to the cubic yard, after being compressed in the stack; it weighs 140 to 180 lbs., and when old 200 lbs." Or from 270 to 482 cubic feet will make a ton.

We have had considerable experience in this matter, as we put up a building some years ago, for the purpose of stowing away hay, which we intended for market. For several years we sold hay from this building, both weighing and measuring the quantity sold, till at last we came to the conclusion that weighing was unnecessary.

Since that, we have measured large quantities, for our neighbors, who have sold at vendues, and, so far as we have learned, the purchasers were well satisfied. It appears to apply well to clear timothy, and clear clover, or a mixture of the two. Take a mow of from 12 to 15 feet in depth, and which has been filled with hay, as it was drawn from the field, and has been lying till spring, and measure the length, breadth and height in feet—multiply them to get the cubical contents. For instance—the length is 40 feet, the breadth 20 feet, and the height 16 feet—40 times 20 make 800, multiplied by 16, equals 12,800 cubic feet, which being divided by 700, the number of feet that make a ton of 2000 pounds, will give 18 1-7 tons. The top of the mow, say about one-third, we rate at 800 feet to the ton, the middle 700 feet, and the bottom of the mow at 500; the whole bulk would average 700 feet, if the mow is 12 or 15 feet deep, but if only 5 or 6 feet deep, count 800 feet per ton, and so accordingly with other bulks.

[New Jersey Farmer.

FAIR OF THE FARMERS AND MECHANICS' Club, and of the Wis. Fruit Growers' Association.

We had the pleasure of attending the conjoint Fairs of the above associations, on Thursday the 25th of Sept., and were highly interested in what we then and there saw. The new Fair Grounds, just north of the enterprising village (almost city) of Whitewater, are ample—containing about twelve acres, and being neatly fitted up and enclosed with a high fence. Around the whole, like a circular border, is a driving course of nearly a mile in circuit, which, by the way, is a fine feature in Fair Grounds, if properly used—for showing horses, or for well regulated fancy riding, and driving. Near the centre of the circle, a tasty, substantial and roomy building, of two stories, has been erected for a Floral and Mechanical Hall; and, all in all, the entire getting up of the grounds and fixtures, reflect the highest credit upon their enterprising and persevering projectors. Whitewater is eminently lucky in having a few thorough and good workers for public projects of this kind. Messrs. Starin, and Newcomb, and their estimable ladies, are among the most eminent of this class; and whatsoever they undertake is sure, except for reasons beyond human control.

The display of animals and articles was large, varied and good; embracing numbers of fine horses. Their trotting speed was tested on the course, at 9 o'clock A. M. We did not witness it; but the time made speaks well for the horses. The track lacks about 50 rods of a mile, and being new, was not in good condition to be used. The time made was as follows:

J. M. Clark's Gifford Morgan,.....3m. 57 sec.
T. Lake's White Gelding,.....3m. 57 sec.
P. Winternitz's Mare,.....3m. 43 sec.
C. M. Simms' Typee Sultan,.....3m. 48 sec.
J. H. Hall's Black Weasel,.....3m. 57 sec.

The show of cattle was good; embracing Durhams, Devons and Grades. Among the first class were the bulls of H. D. Converse and T. Lake. Messrs. R. Armstrong, D. P. Dow, and others, showed good Durhams.

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Mr. Wilds had a good Devon bull. There were also several pairs of handsome working cattle. Messrs. J. M. Converse, A. F. Richmond and J. Thayer showed some specimens of blooded and grade steers. Aaron King and others, showed excellent cows and splendid calves; we had no time to examine the stock as carefully as we could have wished.

The sheep were fair in amount, and of more than average good quality. The Spanish Merino bucks of Mr. H. Hemmingway and Elisha Williams, stood pre-eminent in that class. The French Merino buck of S. B. Newcomb was a fine animal, and took the premium. Mr. H. E. Coon and Mr. O. P. Dow had decidedly good sheep of the same class. B. B. Trussman had a handsome lot, embracing a buck, and ewes and lambs, of Spanish Merino. There were also many other good specimens, more than we have space to particularize.

The show of hogs was nothing extraordinary, although there were some good specimens. The same of chickens. We noticed none except a fine coop of Shanghais, shown by Dr. Riddell of Palmyra.

The vegetable kingdom we found no time to examine; but understood it was "big."

The Mechanical and Manufacturing department was creditably sustained, and foremost in this list were Messrs. Winchester & De Wolf, with their fine plows and various farm implements; also a good looking lot of cook stoves, manufactured at their establishment, by an enterprising firm recently from the East. Their work appeared equal to anything imported. We hope they will meet with the success such an enterprise demands. Stoves should not be imported from the East, any longer than is actually necessary.

The Wis. Fruit Growers' Association make a good show in the 2d story of the Hall, for this uncommon barren season. Apples were the predominant feature, and embraced a fair range of varieties; mostly late autumn and winter. Mr. A. G. Hanford, of Waukesha, had some thirty varieties of apples, labelled true to name, also some choice specimens of Grapes, from the vineyard of Mr. Smiley Shepherd, of Hennepin, Illinois. Mr. H. J. Starin, also, had an extensive and good variety of apples, all properly labelled, which by the way is an important thing, too often neglected by those exhibiting fruit. H. Weed, Esq., of Lima, exhibited a small but choice lot of Winter apples. Also Mr. H. Beebe, and A. B. Pratt, of Racine. But the most attractive article, was a choice lot of grapes, of the Isabella, Catawba and Clinton varieties, grown by Henry Russell, on the shore of Geneva Lake, in Wal. county. They were as fine as need be, and eat remarkably well, as a goodly company can testify, who partook of the same sort, as a desert, after a good dinner that day, at the hospitable board of Mr. and Mrs. H. J. Starin.

Pears and Peaches were wholly wanting at the show. We had almost forgotten to mention that there were two apples on exhibition of last year's growth; one of them a Red Romanite; the other we did not know.

But we must close for want of space, altho' there are still many things we would like to refer to. Suffice it to say that the enterprise so far shown by the F. & M. Club, and the Wis. F. G. Association, are highly creditable to all concerned, and promise a long career of usefulness. P.

AN IMPORTANT INVENTION—NEW PLOW.

We see in the western papers, notices of a newly invented plow, which promises to be a very valuable acquisition, if what is said of it be correct. Mr. E. Abbott, former editor of the *Valley Farmer* at St. Louis, writes to that paper as follows:

This afternoon we rode out on the prairie to witness the first experimental trial of a new prairie plough, the first of which has just been finished at the Eagle foundry in this city. Mr. Jesse Frye, its inventor and builder, is a most ingenious mechanic, and by the production of this implement has put himself in the front rank of inventors. The plow of which we speak is styled "An adjustable anti-friction carriage plow;" and when we say that with two horses attached to it, a furrow twenty-four inches wide and five inches thick was rapidly turned in the toughest kind of prairie sod, and that too in ground that had been beat down by cattle, and dried by the summer's drouth, until it was as hard and as dry as ground can be, our readers will not think us extravagant when we style it one of the greatest inventions of the age. Moreover in this trial, the driver of the team and the inventor of the plow, both heavy men, rode at their ease on a seat prepared for the purpose, and placed over the plough. It appears a very simple machine easily adjustable, and not liable to get out of repair. An ordinary plow-man can ride at his ease, manage the

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plow, and drive without difficulty. A select number of the best mechanics and scientific men of this city, all, without a dissenting voice, pronounced themselves wonderfully pleased at this success, and considered that it would save at least 75 per cent. of the power usually employed in breaking prairie. Several farmers present affirm, that with a team of four horses, they could easier break four acres per day of prairie, than they could two acres with an ordinary breaking team of twelve oxen. Some of the peculiarities about this plow are:

First—It is supported on a carriage which runs on four wheels. This carriage takes all the *weight* of the plow, leaving nothing to be dragged on the ground. It also overcomes all the *land side* friction—the share being held firmly in its position by its attachment to the frame of the carriage, cannot press upon the land side. Thus when the plow is out of the ground, a boy twelve years old can move it all about the lot, a feat not easily performed by two men with an ordinary breaking plow.

Second—The mold-board is composed of anti-friction rollers, which are arranged in the most scientific manner, so as to lift the turf and turn it over, with the least possible resistance, thus overcoming nearly all the friction from this operation.

We believe Mr. Frye has perfected an improvement in the plow which is of immense importance to the farmers of our country, and as the principle is equally applicable to plowing all kinds of land, we predict a great change in the manner of performing this hitherto laborious but necessary part of farm labor. We learn from Mr. Fry that he will visit several of the fairs this fall.

We add to the above the following from the Illinois Farmer:

"On the 16th of August there was a public trial of this plow on the Sangamon Bottom Prairie, at what is called 'Marsh's Ferry.' The trial was made on what is called 'swamp ground,' the toughest piece of ground that could be found in the whole prairie. The plow was put into the ground about three o'clock and was drawn by four horses. It did the work well, cutting some twenty-six inches. The ground was, of course, baked hard. It was hard work for the horses; but it was conceded by good farmers present, that eight yoke of cattle would not have drawn a common plow, cutting the same width which was cut by the Adjustable Plow, with anything like the ease with which the horses did their work.

"At the close of the trial, the company present was organized into a meeting, and the following resolutirns passed:

Resolved, It is the sense of this meeting that the "Adjustable Anti-Friction Carriage Plow," invented by Mr. Jesse Frye, is an important improvement on any plow now in use, and will do more work with less power than any plow with which we are acquainted.

We need only add, that since the above noticed trial of the plow was made, it has been subjected to several other trials, and in all cases has been successful. The exact amount of the power saved cannot be ascertained except by the use of the dynamometer.

To see two or three horses breaking prairie with a plow cutting twenty-six inches—the plowman seated comfortably on a seat above the plow—having the team and the plow at his perfect control—is a gratifying and wonderful sight, even in these days of progress.

FALL PLOWING.

The advantages of Fall Plowing may be enumerated as follows:

1. In autumn, the team having become inured to work through the summer, is more vigorous and better prepared for labor than in the spring, and other farm work is less pressing in its demands upon the time and attention than in that bustling period. Let all the plowing be done which is possible in the fall, and still the spring work would give abundant employment to the farmer and his teams, in drawing manure, cross-plowing, cultivating, harrowing, &c.

2. In the fall, low, moist lands are generally in better condition for plowing than in the spring time. We say generally, for this season low, moist lands are decidedly moist, at present. Still, we cannot hope for any better state very early next year, and if plowed as they should be, wet lands will suffer very little from water through the winter.

3. Stiff, heavy soils, plowed in autumn, undergo, by the action of water and frost, a more thorough disintegration—clays are pulverized and crumbled, and heavy loams and hard pan lands are acted upon in a like manner and with like benefit.

4. Heavy, coarse swards, full of rank weeds and grasses, can be better subdued by plowing in the fall—their roots are more apt to die out, and far less liable to sprout again than when plowed in the spring. The turf is better prepared by its more advanced state of decay, for the use of the crops which may be sown or planted upon it.

5. Fall plowing disturbs the "winter arrangements" of numerous worms and insects, and must destroy a large number of these pests, and also their eggs and larvæ. This is a minor advantage, but one worthy of consideration, especially on lands infested with the wire-worm.

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The principal objections to fall plowing are these;

1. The loss of that fresh friable condition readily permeable to air and moisture, and the consolidation of the soil by long exposure to changing and stormy weather. This, on soils of a light character, is a very serious objection to plowing in autumn.

2. The loss of vegetable matter and the gases of the same while in a state of decay, is another disadvantage. The latter is but a small loss, if the work is done late in the fall, but often, on hill sides, a large part of the soluble and floating organic matter is washed away by the heavy rains of winter and early spring time. The soil is also consolidated by the same influences. Heavy swards thus situated would sustain less injury than light swards or stubble lands.

The advantages and disadvantages of this practice may be appropriately followed by brief directions for performing the work:

1. Do it in the best manner.

2. Throw up low lands in narrow beds and cut cross furrows and drains sufficient to carry off at once all the surface water. This will obviate one great objection to fall plowing.

3. Plow deep and narrow furrows—such will best secure the action of the ameliorating influences of frost upon the soil. A rough broken surface is better than a smooth one for this purpose. [Rural New-Yorker.

CISTERNS, AND CISTERN BUILDING.

In a previous number we have spoken of pure water as essential to health. We regard rain water as pure, fit for use. How to get it and keep it is the question now before us. To do this, cisterns must be made in the ground. The size of cisterns may depend upon the amount of water wanted. They may vary from five to twenty feet in diameter, and from ten to twenty-five in depth. A deep cistern will keep the water cooler, and probably better. From sixteen to twenty feet is a good depth. We are of the opinion that excellent water can always be kept in cisterns of that depth. From six to nine feet is a good width for ordinary family purposes. They should be dug round, and with the utmost regularity, be perpendicular, the bottom smooth, and a little hollowed in the middle, to facilitate the process of cleansing, and give greater permanency to the coat of cement. A permanent clay soil is generally solid enough when well dug, and the sides well smoothed and cemented, to make a lasting cistern; but it is always best to brick over the bottom and sides. This gives the most reliable permanency if the bricks are properly laid. It prevents any water pressure from bursting in, and makes a solid basis for the cement. The top should be arched over with brick, leaveng a hole in the middle about two and a half feet in width, and arched over sufficiently to sustain any pressure that may ever be expected to be put upon it. When it is thus dug and arched, or bricked, it is ready for the cement, which should be carefully put on at three coatings. Good hydraulic cement, well put on, will make a permanent water-tight lining for the cistern, which is cheap, and not easily displaced.

The next important matter is the filter. Pure water cannot well be obtained in all seasons of the year without a filter. There are many modes of filtering cistern water. One is to dig a small cistern six or eight feet deep, near the main one, and fit a filter in the bottom of this, having first connected it with the main cistern by a lead pipe. The orifice of the passage to the main cistern is first protected by bricks or stones. These are covered with a strong coarse woolen cloth. Upon this is placed a layer of powdered charcoal; on this a layer of gravel; another cloth similar to the first; then charcoal and gravel again. The more of these layers the more perfect the filter. They must be so placed that all the water shall pass through them. The filter in all cisterns is made in the same way.

Another arrangement is to make two cisterns of equal depth, one much larger than the other, and connect them at the bottom with a lead pipe. Lay up a brick arch around the orifice of the passage in the large cistern, about two feet high, and make the filter in this. Let the water from the roof into this cistern. The main body of the water being in the large cistern, it will filter slowly, and the water will have time to settle all it will, before going through the filter. There is probably no better plan for good water than this. The only objection to this plan, is that if the filter needs repairing or replenishing, the water must all be taken out to do it.

Still another plan, is to make a large and a small cistern, the large one half the depth of the small one. Make the filter in the large one as in the last named plan. In this the water filters quicker, without time to settle; but the filter can be repaired without the loss of the water in the small one.

Some divide the filtering cistern with a brick wall, and place a filter in this, and another at the aperture as above, making two filters. This doubtless will give excellent water. Whatever plan is adopted, care should be taken to do it well. Let all the work be done well, and of good material, and there can be no doubt of securing good water. [Valley Farmer.

LABOR drives away three of our most inveterate enemies, viz: ennui, vice and poverty.

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SONG OF THE AUTUMN LEAVES.

BY MARY B. CAULKINS.

"We came in the early Spring time,
With birds, and bees, and flowers,
We have cheered the face of Nature
Through Summer's ling'ring hours;
We have thrown a cooling shadow,
When the sun was burning high,
And have flecked the Earth with beauty
When the moon was in the sky.

"We have listened to the warbling
Of every Summer bird,
And have murmured back an echo
When by evening zephyrs stirred;
And when 'the heavens were weeping,'
We have kept the falling rain
Until the shower was ended,
Then played it o'er again.

"Our coming brought new lustre
To many a drooping eye—
We have seen Hope's blessed sunlight
In many a bosom die!
We are falling now on grave mounds,
Where beauteous forms are laid;
They watched our coming gladly—
They do not see us fade.

"We came in the early Spring time,
With birds, and bees, and flowers,
We have cheered the face of Nature
Through Summer's ling'ring hours;
Now our pleasant task is ended,
We need no longer stay—
We have felt the frosts of Autumn,
And soon we pass away."

COUNTRY GIRLS.

Meta Victoria Fuller, in the Ohio Cultivator, in a sisterly way, thus talks to country girls:

"The farmer's daughters are soon to be the life as well as the pride of this country—a glorious race of women which no other land can show. I seek not to flatter them; for before they can become this, they will have to make an earnest effort of one or two kinds. There are some who deprecate their condition, and some who have a false pride in it, because they demand more consideration than they merit. A want of intelligence upon all the subjects of the day and of a refined education, is no more excusable in a country than in a town-bred girl, in these days of many books and newspapers.

"Many girls are discouraged because they cannot be sent away from home to boarding-schools; but men of superior minds and knowledge of the world, would rather have for wives, women well and properly educated at home. And this education can be had whenever the desire is not wanting. A taste for reading does wonders; and an earnest thirst after knowledge is almost certain to attain a sweet draught from the 'Pierian Spring.' There is a 'farmer's daughter' in this very room in which I am writing—a beautiful, refined and intelligent woman, in whose girlhood books were not so plenty as now, and who obtained her fine education under difficulties which would have discouraged any but one who had a true love for study.

"I will state why I think the country girls are yet to prove the hope of this country. The women in towns and cities are becoming so universally unhealthy, and so almost universally extravagant, foolish, and fashionable, that men are almost in despair of getting wives who are not invalids, and providing them with what they demand after they have married them. Unless a young man has the fortune (good or bad) to be the inheritor of wealth, he must spend the best bloom of his youth in acquiring enough 'to start upon,' as people are expected to begin now-a-days. Men even in high places would go to the country for their choice, if they met there equal refinement with intelligence. Women are preparing to take a noble stand in history, and they cannot do it in ignorance.

"Town girls have the advantage of more highly polished manners and greater accomplishments; but country girls have infinitely more to recommend them as rivals of their fair city sisters. They have more truth, household knowledge, and economy, health, (and consequently beauty,) simplicity, affection, and freshness of impulse and thought. When they have cultivated minds, they have more chance in their favor for good sense and real ability, because so much of their time is not demanded by the frivolities of society. The added lustre of foreign accomplishments could easily be caught by such a mind from a very little contact with the world.

"I would not speak as though our farmers' daughters were deficient in education. Many brilliant scholars and talented women may be found among them; but I would seek to awaken the ambition of all to become that admired and favored class which they ought to be, if they will but unite refined culture with their other most excellent graces.

"A sweet country home, with roses and honeysuckles trained to climb over it, with good taste, intelligence, and beauty within, toil enough to insure health, and leisure enough to court acquaintance with books and flowers, and the loveliness of nature—with peace, plenty, and love, is surely one of the paradises which heaven has left for the attainment of man."

The N. Y. State Ag. College was, at a recent meeting of the Board of Trustees located at Ovid. The farm selected contains 670 acres, and extends from the village of Ovid to Seneca Lake. It is a beautiful location, comprises a variety of soil, and is well calculated for the institution—as we learn from a correspondent whose article (on that and other Seneca Co. topics) is necessarily deferred. At the same meeting, Hon. Sam'l Cheever was elected President of the College. [Rural New Yorker.

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THE WONDERS OF INDIA RUBBER.

Among the recent applications of India Rubber, none are so remarkable as the manufacture of what is called "Hard India Goods," into which the rubber enters most largely. There is in New York a company called the Beacon Dam Company, which is devoted to the manufacture of this class of goods. By a process that originated with Mr. Chaffee, coal tar is mixed with the rubber, and the compound makes one of the most solid, elastic, and elegant articles that can be found in the market. It resembles polished stone, is as black as coal, needs no finish, and has of itself as hard and exquisite a polish as it is possible for any metal to bear. There seems to be no end to the articles into which it can be made. Canes of the most elegant form and appearance are constructed out of it, and are as tough as so much steel, while they have all the elasticity of whalebone. Cabinet work, inlaid and mosaic, ornamental to the parlor and the chamber; spectacle bows and glasses for the eye are made so light as to be no annoyance, while their elastic character causes them to sit firm to the head; opera-glasses, castors, sand-stands, ink-stands, brushes for the hair, that cannot be harmed by hot water, tape lines, pen-holders, pencil-cases, cigar-cases, government boxes for the army and navy, government buttons, and an endless variety of articles, are thus made, and the articles are of the most elegant character; syringes of a novel form and character; machines for oiling cars and engines, on a new principle, indicate that this new use of rubber is to work a complete revolution in the arts and manufactures.

But one of the greatest applications of this new rubber manufacture is the new telegraph wire that is made from it. It needs no poles, as it is laid on the ground. It needs no covering; a trench of a few inches is dug; the rubber telegraph wire is put in and covered up; the wire is enclosed with the rubber; no dampness can affect it; no storm can render the wires inoperative; no insect sever; no rust corrode. It would appear fabulous if we should state the miles of wire that have already been engaged, and the goods cannot be made fast enough to meet the demand.

The government of the United States is now the best customer of the Beacon Dam Company. The call for the navy and army button is immense; the article is elegant; the naval button has on it the motto, "Don't give up the ship." And so tough are these rubber buttons, that if one is placed on an oak plank and pressure applied, it can be sunk clear into the plank, and will come out unharmed; and the government shaving-boxes, which are about three inches in diameter, are so strong that a man weighing two hundred pounds can press his whole weight on one of them, and not break it. Gun-handles, sword-handles, and other military implements, are constructed from this material. They are cheap, elegant and enduring. [Boston Journal.

SHORT CHAPTER ON SEEDS.

True, a seed is a seed; but it is a good deal more than a seed. It is a history, and it is ready for another history. A whole summer is wrapped up in that pea. A whole summer wrought to form that bean. A whole summer spent its time about that ear of corn. It came forth small as a needle. It stood tremulous and yellow for weeks, it waxed apace in June, it rustled in July, it stood up the noblest of all the grasses in August, with a many-fringed band of flowers on its lap, and with a little baby ear at its breast, with silken hair hanging down uncombed yet untangled, and spotted and powdered with pollen. This is the time to wander in the corn! You are hidden at six steps. It is a pet forest. People ride past and wagons roll within a few rods of you, and you are unseeing and unseen. The wind comes in gentle puffs, and sets all the pliant sword leaves a-quake. Little birds that do not know that you are there, fly in and alight within hand reach, but at a glance, seeing their mistake, fly as if the tassel was hot and burned their feet! We see all *that* in those barrels of Tuscarora corn, in that white flint corn, and in that yard-long ear of yellow flint. [H. W. Beecher.

Harvesting Turnips.—Pulling turnips, and cutting off the tops by hand and knife, which is almost the universal practice among American farmers, is about as far behind the age of improved husbandry as digging up the land with a hoe, instead of plowing. In England, turnips are generally planted in drills; at pulling time, the laborer passes along the row, with a light, sharp hoe, with which he dextrously cuts off the tops, throwing them by the same motion into the hollow between the rows. Another person follows with another hoe, which he strikes below the bulb, so as to cut off the tap root, throwing the turnips of two rows together, ready to gather and carry to the pile or cart for storage. Sometimes one hand performs both operations of topping and digging, but two work to the best advantage.

The Country is both the philosopher's garden and library, in which he reads and contemplates the power, wisdom and goodness of God.—*Wm. Penn.*

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SIT UPRIGHT.

"Sit upright! sit upright, my son!" said a lady to her son, George, who had formed a wretched habit of bending whenever he sat down to read. His mother had told him that he could not breathe right unless he sat upright. But it was no use; bend over he would, in spite of all his mother could say.

"Sit upright, Master George!" cried his teacher, as George bent over his copy book at school. "If you don't sit upright, like Master Charles, you will ruin your health, and possibly die of consumption.

This started Master George. He did not want to die, and he felt alarmed. So after school he said to his teacher:—

"Please, sir, explain to me how bending over when I sit can cause me to have the consumption?"

"That I will, George," replied his teacher, with a cordial smile. "There is an element in the air called oxygen, which is necessary to make your blood circulate, and to help it purify itself by throwing off what is called its carbon. When you stoop you cannot take in a sufficient quantity of air to accomplish these purposes; hence, the blood becomes bad, and the air cells in your lungs inflame. The cough comes on. Next the lungs ulcerate, and then you die. Give the lungs room to inspire plenty of air, and you will not be injured by study. Do you understand the matter now, George?"

"I think I do, sir, and I will try to sit up hereafter," said George.

STEAM ENGINES FOR THE FARM.

These are not best perhaps on small farms, but on large ones they will be a great advantage. In the Mark Lane Express, of London, three several forms of portable engines are advertised. A good engine of five horse power can be furnished for $500, or $100 for one-horse power. The engine is placed on a truck, drawn to the place where it is needed, the band wheel is connected with the machinery to be driven, the boiler is filled with water, and the fire lighted. One-fourth of a cord of dry wood, hard and well prepared, will drive a five-horse engine all day. [Exchange.

THE AMBROTYPE.

The ambrotype, as it is called, has suddenly come into great favor with the public. It gives a positive picture, like the photograph, not a negative, like the daguerreotype. Taken on glass, and in a shorter time than when the chemical is spread upon silver, the lines seem sharper and more delicate; and backed by a dark ground, the picture does not require to be so carefully held with reference to the light, in order to be visible from all points.

STOCK REGISTER.

IMPORTED FRENCH MERINOS.

Mr. J. R. Page was at the farm of the Illinois Breeding Association, at Summit, Cook County, in May last, and took the sketch presented on the opposite page, of the imported French Merino ram "Seventy Seven," and ewes No, 2 and 5, selected from the celebrated flock of Monsieur Cugnot, of Seine and Oire in France, and purchased for the Association by Hon. John Wentworth of Chicago, Ill..

There are still a few full blood yearling rams and a few ram lambs for sale out of this buck and imported ewes. Address S. Cook, care of Hon. John Wentworth of Chicago, Illinois. See advertisement of Sargent Cook.

INTERESTING TO BANKERS AND WOOL GROWERS.—While this country is receiving large shipments of gold from California, it will be a matter of interest to all to know something of the products of that "mine of untold wealth," Australia. Over $100,000,000 worth of gold has been realized in that country during this year, without much interfering with other products of that country; indeed, the wool crops are better than over, and the recent sales in England exhibited a firm market. Some of the Australian sheep owners were attending the sales of their clips in London, and there were men whose flocks numbered 60,000 head, giving a clip of 300,000 lbs. of wool in the grease, which brought 15d.—say 30 cents, being a value of $90,000 for a clip, of which half is profit. Such property, with so certain and regular a market as London, where wool is free, is better than gold digging, even in a profitable gold country.

A Columbiana County correspondent says "I lost two very fine Suffolk sows, and nine pigs, last week. They died from eating salt, which was put in a sheep trough. One sow cost me forty dollars; and as these sows were of pure blood, I had engaged some of the pigs at twenty dollars a pair." [Ohio Farmer.

KNOWLEDGE directs practice, yet practice increases knowledge.

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IMPORTED FRENCH MERINO BUCK AND TWO EWES.

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For the Farmer.

MERINO SHEEP.

YORK, Sept. 20, 1856.

MESSRS. EDITORS—In your magazine of the present month I notice an article from the Michigan Farmer, by J. L. Wheelock, giving the clip of ten of his Merino sheep, weighing 71 pounds, and your answer to his challenge, giving the weight of ten fleeces from your sheep, weighing 80 pounds.

To show that Wisconsin is hard to beat, I will give an account of the weight of the fleeces of a few of mine. I have a few Merinos, from the flock of J. D. Patterson, of Westfield, N. Y.. They are mostly a cross of French and Spanish. The clip from the lot, (31,) weighed 249 lbs., and sold, with about an equal quantity of coarse wool at 34 cents per pound. The fleeces could all have been increased by good care and keeping.

I will give the weight of ten fleeces, to match yours—all from ewes mostly having early lambs:

No. 2—	⅝	French,	⅜	Spanish,	11lbs. 6oz.
" 4	Full Blood,				8l.s.
" 5	⅞	French,	⅛	Spanish,	9lbs.
" 13	⅞	"	⅛	"	8lbs. 6oz.
" 15	⅞	"	⅛	"	8lbs. 4oz.
" 16	⅞	"	⅛	"	8lbs. 8oz.
" 18	⅞	"	⅛	"	8lbs. 4oz.
" 20	⅞	"	⅛	"	8lbs. 12oz.
" 26	⅞	"	⅛	"	11lbs. 8oz.
" 27	⅞	"	⅛	"	10lbs. 8oz.
Total,					92¾lbs.

I have a ewe ⅞ French, which at 27 months old had sheared (at two clips,) 26 lbs. of wool, and had a lamb four months old. I have also the following certificate from my shearer of last year:

YORK, May 12, 1855.

I have this day sheared for E. D. Montrose, 4 yearling Merino ewes, which sheared as follows: 12¾, 12½, 14¾, 9¾ lbs.

J. W. BOLTON.

Some other State will have to next give in its evidence of wool-growing faculty.

E. D. MONTROSE.

The shearing of our friend MONTROSE'S sheep is certainly extraordinary, and highly creditable to him and to the State. He seems to beat the rest of us all to smash: but when it is recollected that his sheep are of the large Patterson French Merino stock, instead of the Spanish Merino, it makes no small difference.

The main point we prided ourselves upon was the uncommon yield for Spanish Merino. Well bred French sheep, we suppose, ought to yield at least one half more weight of wool than the Spanish Merinos, to pay for the difference in the quality of the wool, and in the food consumed by these large sheep more than common sizes. We know by observation that Mr. M. has an excellent stock of French sheep. EDS.

THE FOOT ROT.

A. B. Dickenson, of Steuben county, New York, delivered an address some two years ago, before the Courtland County Society, in which, among other things, he spoke of his mode of curing the foot rot in sheep, and foul in the feet of cattle. He said, "I have had some experience for twenty-five years, with what I once considered as one of the most injurious diseases to cattle, and more especially to sheep. I now regard it as of little or no consequence, and I will trouble you with one of twenty-five years' operation, and to that end will take the year in which the disease was most malignant, which was in 1850. I purchased in that year more than 30,000 sheep, and had not less than 1,000 head of cattle upon my farm. During the pasturing season, more than one-half of all my sheep were affected with the rot, and because they were thus deseased, I purchased so largely. Men came all the way from Ohio to sell me their sheep, expressly on this account. My remedy is simple and plain, and my cure equally sure. I fenced a three cornered field, and at the pointed corner I make a lane. In this lane, or neck of the field, I set a trough twelve feet long, twelve inches deep, of the same width, in which I fasten some scantling, substantially, flaring out, then cover the scantling with boards, so that only one sheep or steer can go through the lane at a time. In a trough I place 50 or 100 pounds of blue vitrol, fill and keep it as full of water as it should be, covering the liquid over with straw, and set the sheep or cattle marching through. By leading a tame ox, the rest will follow. A good shepherd-dog will start the sheep through, and one man, with a well trained dog, will drive through 10,000 in one day. This vitrol will kill the disease. It will make or replace hoofs, or parts that have rotted off—*Mich. Farmer*.

POULTRY—THE BEST LAYERS.

MESSRS. EDITORS—Noticing articles in your journal on the relative value of certain breeds of fowls for laying, permit me to endorse a recent statement by the "Brooklyn Hen Coop," as to the qualities of the Black Spanish and Leghorn fowls. I have kept them both for some time, as well as a number of other varieties, but find none to equal them in the quantity or size of eggs—rarely evincing a desire to set—in fact none of my Leg-

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horns have ever shown that desire. Last Spring I confined three hens and one cock of the following named varieties, each quartern in a seperate enclosure, and for 72 days kept an accurate account of their performances, which was as follows, beginning Feb. 17 and ending April 30th:

Leghorns laid 122 eggs—no desire to set.
Spanish do 103 do do do
Bl'k Polands, 83 do do do
Gold do 66 do do do
Grey Dorkins, 65—all setting April 15.
Cochin Chinas, 43 do do March 18.

You have here the merits of the above fowls as layers, as far as my experience goes. Of course the great severity of the weather at that time must be taken into consideration. [R. W. P. in Country Gentleman.

IS SALT GOOD FOR ANIMALS?

Having occasion to call at a livery stable, not long since in ——, my attention was called to some fine looking horses, belonging to the proprietor, who is a man of more than ordinary experience in the management of horses, and in the cure of those diseases to which they are incident. I asked him how it happened that his horses were in such good plight, and looked so much better than other peoples? "Ah!" said he, "there is a secret about that which I cannot tell every one; and if I should, they will not follow my directions, and so I may as well keep it to myself; but as I have not yet obtained a patent, I will tell you, and then you can act as you see proper. I will premise by saying that I am not able to keep my horses and other stock in as bad condition as some other folks do—it is too expensive. I have found out a cheaper plan, and it happens to be a much better one." This excited my curiosity, and made me more anxious to know his secret. He then told me that the whole of his secret consisted simply in this, that he gave his horses no salt, and that he believed the use of it was deleterious to all animals. His horses, he assured me, not only kept in good order without it, but they were freer from disease than they used to be, when he gave them as much salt as they wanted.

This was new doctrine to me, and I could not receive it without more evidence of its orthodoxy. I began to reason the case with him; I told him that it was the commonly received opinion that salt was strengthening to animals—that it stimulated the stomach, assisted digestion, and gave tone to the whole system: that nature intended that it should answer some valuable purpose, or why would it have been so widely diffused throughout all parts of the earth?

He said these were the populor arguments in its favor, and he did not know that he understood the anatomy or the physiology of the animal system well enough, or the *modus operandi* of salt, when taken into the stomach, to explain all the phenomena connected with this theory, or to confute all the arguments which may be brought up against it; but, with him, experience was worth all the theories that could be brought in conflict with it. He believed that salt stimulated the stomach beyond what nature required; that it produced an unnatural thirst, and caused the animal to drink more water and take more food than the stomach could properly digest, and this would necessarily produce disease and premature death in any animal. He referred to man in a savage state, as an instance of longevity over civilized life, when the body was not pampered with coddiments and highly seasoned victuals. Nothing wears the system more than over-excitement, or taxing the powers of nature beyond a certain limit. He said the difference between a salted and an unsalted horse was perceptible in the perspiration. In the one, the salt will ooze out through the pores of the skin, and will often settle and dry on the hair, causing a roughness in its texture; whereas, from a horse that eats no salt, the sweat will issue through the skin, as clear and as pure as spring water, and leave the hair and skin soft, and in a healthy condition; and the fact that nature has diffused the article abundantly through the earth, is no more proof that it was designed for the use of animals, than that men should resort to grog-shops because they are scattered with a plentiful hand over the country. If this was not an *argumentum ad hominem*, it was certainly presenting the subject in a light that I was not exactly prepared for, and I asked permission to reflect upon it a while.

Logicians tell us that there are two kinds of reasoning—one they call *a priori*, and the other *a posteriori*: one is reasoning from cause to effect, the other from effect to cause. The latter is the kind of reasoning to be used in the present case. Here we see the effect of salt upon animals—it subjects them to disease, if we allow facts to speak; and it is our business to find out the cause. It is not enough to say that salt is good, because it has been long used, and is universally believed to be advantageous to animals. If facts are found to contradict universal practice, then we must conclude that universal practice is wrong.

This is a matter which I do not believe can be fully and satisfactorily proved by any course of reasoning—it must be ascertained by actual experiment. Let no one say that it is useless to make the experiment. I think a great deal depends upon it.

[Tenn. Farmer and Mechanic.

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HORTICULTURE.

The main thing remaining to be done in this behalf is to prepare for winter. Orchards should be shielded from mice, rabbits, sheep and other animals. It is a great mistake to leave orchards unfenced, and liable to be rubbed, browsed, and broken down; many are injured, and often wholly destroyed in this way.

Grape vines should be taken from the trellis, and laid in shallow trenches, and covered for the winter. Raspberry bushes should be treated in the same way; care being taken in all cases not to bend them so short as to injure the stalks. We doubt if they can be safely got through our hard winters without this precaution, with any chance of bearing fruit. This matter of burying must not be omitted until it is too late, and the ground frozen.

Put the coarse manure over the strawberry beds, and other tender vegetables and vines. Put your roots and vegetables all well into store; most articles of this kind keep the better for being mainly excluded from the air. Turnips, beets, &c., for table use, should be put in bins, or barrels, instead of being scattered upon the cellar bottom. Take care that they are not kept so warm as to grow, as it nearly spoils them for cooking.

Look well to the seeds and roots that are kept for next year's planting; that they are not nibbled by mice, or otherwise destroyed. Saving seeds seasonably and well, is a matter of much importance to those who would know what they are doing. Look up the garden tools, clean them up and put them carefully away, until time of need. Don't neglect this, from thinking it a trifling thing. It will save you much expense and vexation on the opening of Spring.

For the Farmer.

TREE PLANTING.

Messrs. Editors—In the last number of the Farmer I find an article in favor of transplanting fruit trees in the fall. I think it is beneficial to take the trees up in the fall, but I would prefer to bury them in a slanting position, so that the body and part of the top are covered, and plant them out in the spring. It seems to me that the south and south-west winds are more drying in Wisconsin than anywhere else in the United States. We know that when any limb or body of a tree shrinks to a certain extent it will die off, and I think it is in consequence of the destruction of its sap vessels. For this reason, when trees are planted in the fall, particular care should be taken to keep the roots secure from frost during the winter, and to protect the body of the tree from the drying winds. I never plant my trees deeper than the cultivated and pulverized earth, and when this is not sufficiently deep I supply the deficiency with a little mound around the tree. All tree roots love a damp soil, but no standing water. Mulching is the very best way to keep trees in a good growing condition. Round the body of a tree for a distance of five or six inches the ground should be compact, and high enough so that when the snow melts around the body no crevices will be formed. It seems mice love a dark sheltered place in which to take their meals. The great botanist Linnæus said that the seat of life in a plant was the pith, (*medulla;*) later botanists deny the assertion, and say that the seat of life is in the bust, (*liber,*) for we see that when the bust is sound a tree will live without the pith; but when the bust is destroyed the tree will die. But by denying the necessity of the pith, it was perhaps overlooked that the bust has its cellular texture, (*tella cellulosa,*) and those pores which we see so plainly in cutting across the grain, serves, in my opinion, as pith for every year's growth. These pores are formed towards the end of the growing season, for if we cut a tree in the winter the pores are always to be seen upon the inside of the last. When we take off the foliage of a limb towards the end of the growing season, so early that it is not prepared for winter, and too late to form new leaves, the limb

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will surely die. In this country leaves do not fall off from young trees early, and some kinds keep on growing until December.

Notwithstanding this, I have taken up apple trees about the middle of October, after I had taken off the foliage, and buried them up and planted them in the spring as soon as the frost was out of the ground, and with the exception of the Roxbury Russett, every one did well. The foliage has to be taken off, for a tree with the foliage on out of the ground will in a short time dry to such an extent as to die. The starting point for the next year's growth is evidently the bust with the pores below it, and when these parts are fully perfected, I think it dangerous to expose the tree to the shrinking process by extreme dry and cold winds; but to take them up in the fall before a severe frost comes over them, I think, is highly beneficial. To understand this more plainly we have to consider that the growing process of a tree is carried on by three different kinds of results—*vasa fibrosa*, *vasa spiralia*, and *vasa medularia*. The foliage in the day time evaporates, and in the night absorbs moisture; the foliage, connected with the vessels, draws up the sap in the same way that water runs through a syphon or the pipe of a pump. This circulation is accelerated by the motion of the tree, by contraction and expansion, caused by cold and heat, and by capillary attraction. The sap drawn up through the wood, (*alburnum*,) united in the foliage with oxygen, nitrogen and carbon, in such proportion as is necessary for the growth of the tree, and then prepared descends through the inner bark and that part of the bust which forms the bark, and forms the new part of the tree.

When late in the fall the foliage is yet vigorous, as it generally is with young and cultivated trees, when the sap is on a warm day drawn up in abundance, and then towards evening is suddenly driven back by severe frost, perhaps too watery and unprepared, then the bust gets destroyed, which is seen by its brown color. The injury is not generally observed until the following spring, when a warm dry air begins to stimulate the growing process, and I think that then is the time that people are deceived by supposing that the warm southwest winds kill off the trees.

Trees established in the ground, with sound roots and neck, will recover from a light injury, such as received in transplanting. As to the selection of trees, there is a great diversity of opinion; some say root-grafted, some high grafted—some say budded in the root, some high up, and I don't know all what; but farmers well know by this time that every one praises the highest what he himself has to sell; and I would advise farmers to ascertain for themselves whether the tree vender has the ability and honesty to sell you the kinds of trees that you desire, and when you plant them out you can see for yourselves that the trees have sound bodies and a good last year's growth. Such trees, raised in your own neighborhood, are the kind you ought to buy; never mind the manner in which they are gotten up, for if your neighbor got them so far by proper care, you can surely get them further.

The first cost of trees is small in comparison with the expense of afterwards caring for them and rearing them properly. A great many people seem not to be aware of the fact that money is nothing else than stored labor, and that when a man has not labor enough to pay for trees, he will hardly have labor to spare in rearing them. It seems to be a natural disposition in men to care most for that which costs most. A genuine article is not so easily gotten as a spurious one.

Last year, winter and summer both were hard on trees, and some folks are talking about getting discouraged in raising fruit. Why did they not get discouraged a few years ago in raising wheat, potatoes, and almost everything else? We have even this year some kinds of apples in some localities, and good ones, too. An orchard and garden ought not to be on low frosty ground, and experience testifies that there is but little benefit to be derived from having many varieties. In order to raise fruit it is not only necessary that we understand it, but that we act according to our knowledge with care and attention. To prepare for an orchard we have generally more time in the fall than in the spring, and the roads are generally better. *

Little things make up the sum of our existence, as moments make up days and years.

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SORGHO SUCRE, OR CHINESE SUGAR CANE.

EDITORS OF WISCONSIN FARMER:

Gents:—As you invite articles from correspondents upon almost every subject connected with the agriculture of Wisconsin, I have thought your readers might be willing to read the results of my experience in cultivating this new plant. Through the kindness of Hon. CHAS. DURKEE I received a small package of seed of the *Sorgho Sucre*, from the Botanical Gardens at Washington, early last spring. My first impression was that it was a *joke*, as the possibility of sugar cane maturing in this State had never entered my mind. Willing, however, to test the matter, at the time of planting corn, I planted the cane seed, and in the same manner as corn. Not having much faith in Patent Office seeds generally, (most usually worthless, so far as my experience goes,) and these in particular, I planted much too thick. It all came up, however, finely; which cannot be said of corn this season. Very little attention was given it. It was twice hoed, and treated in all respects as the corn crop along side of which it was planted. The growth was very thrifty; but owing to thick planting and no thinning out, only a part of it matured seed. Had it received even respectful attention, I doubt not all of it would have headed out and ripened.

So much, then, for the experiment. It shows this fact, which may be new to many, that this variety of sugar cane will mature and ripen in the climate of Wisconsin, altho' the season, on the whole, has been unfavorable to corn.

After planting I saw an article in the National Intelligencer, from a gentleman in Illinois, giving the result of his experience upon about one-fourth of an acre of the "*Sorgho*," which, with my own subsequent observation, leads me to think it may yet become a very important addition to the crops of our farmers. As an article of fodder, it will rank equal, if not superior to anything we now have. The stalks are very heavy, rich and juicy; and, after growing the plant, I am prepared to believe his statement, that it will cut 25 tons per acre. I have several times fed it out, both in a green and dry state, to cattle, horses and hogs. For the sake of testing *their* instincts and preferences, I mixed it in with corn-stalks. In every case the cane was greedily sorted out and entirely consumed, no portion being left—while, as is well known, there is a large waste to corn fodder. The plant grows from six to ten feet high, and whether sown broadcast, drilled in, or planted in the usual manner, cannot, if it grows at all, fail of a heavy yield of very superior feed. If an acre would yield ten tons, even, it would be preferable to hay, being at least equally nourishing, and requiring but very little labor in the cultivation.

But not only is it likely to produce cheap and abundant fodder; it is also worthy of attention for its saccharine product. Were an acre of the stalks crushed between rollers—at the proper stage—and the juice collected and boiled down, I hazard little in saying that every cultivator would receive for his trouble several hundred weight of crystalized sugar, a barrel or two of syrup, and a sufficiency of *material* left for several barrels of vinegar; while the stalks would be but little damaged as an article of food. The juice when allowed to ferment produces an article analagous to cider; or it may be further concentrated and converted into alcohol. The seed are also of much value as an article of food. There is no waste to any portion of the plant.

I am aware that it will not do to be too sanguine at the result of one or two years' success. Yet, as this is a new and *northern* plant, growing thriftily in Washington, Illinois and Wisconsin—the only places where a trial has been made that I am aware of—and as it is something the western farming community need, filling a very important place, if successful, I have written this to induce as many as possible to try it the coming year, for the sake of enlarging the general experience. We have three months of tropical heat most seasons; and if this variety of the sugar cane will mature, it is worthy of a trial on a larger scale. I know of no natural cause why it may not succeed, and have much faith that it may yet become of value to our agriculturists.

A scientific description of the plant may be found by referring to the Patent Office Report for 1854, page 219, to which attention is invited. As to practical results, we shall soon doubtless hear from many States,

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as seed was probably widely distributed last winter. Should you meet with anything important on the subject, you will oblige one of your readers, at least, by publishing it. Respectfully, Yours, H. A. T.

MADISON, Wis., Oct. 13, 1856.

For the Farmer.

FRUIT STEALING.

MESSRS. EDITORS—During the melon and apple season just past, I presume many of your readers had reason to regret that civilization has not progressed enough to permit fruit to ripen, and permit the owner to enjoy the produce of his labor. It is a great disgrace to us that "Young America" is permitted to practice "border ruffianism," so far as fruits are concerned.

A man has a better moral right to go to his neighbor's granary, and steal wheat for his own use, than to steal melons and apples, because the two last cannot be locked up.

Many of the Eastern States make it a State's Prison offence to steal a bee-hive, simply because it is something that cannot be locked up. Why should not growing fruit have the same protection? We might hope that it would some day, if we could see any prospects of a majority of the members of our various State Legislatures being anything but such persons as have failed for the want of ability and energy in everything they have undertaken, and at last turned their attention to office-seeking, and are bound to pass such laws and no others as are likely to catch the rabble vote and re-elect or promote them.

Farmers, go to election and vote only for such persons as are honest and capable, and know enough to get a living without office-seeking. I think a man should have some other qualification for office besides the mere fact that he wants it and does not know enough to get a living without it.

A FRUIT GROWER.

WIS, Sept. 18, 1856.

We fully endorse the sentiments and advice in the foregoing letter, and hope the time is not far distant when the interests of Agriculture and Horticulture will be considered worth protecting and encouraging, and when men will be selected as carefully to take charge of our public as our private interests. Yet how many there are who think it all right to vote for any scoundrel or spendthrift loafer, if he gets the *party* nomination. A man to handle the entire money of the State, whom they would not trust to handle twenty-five cents of their own private means.

We hope to live to see such folly outgrown, especially by men who make any pretentions to common sense or honesty, and think we shall if we do not die pretty soon. Our people are getting some pretty thorough practical lessons, now-a-days, that will not be wholly thrown away, except upon the willfully ignorant.

Our advice to all in the matter of voting is to go for none but *honest*, *industrious* and *useful* men—such as you are not afraid to trust with your own money, and for such men go to the death. Such a course would soon set Hounds and official Lazaroni to kiting, and after a little to working for a living.

This article ought to have appeared last month, but got mislaid. EDS.

EXTRACT FROM PROCEEDINGS OF THE American Pomological Society at Rochester.

GRAPES.

The *Isabella*, *Catawba*, and *Diana*, being already on the list for cultivation, the *Delaware* was proposed to be added. Charles Downing had found it one of the best, hardy, and ripening well. Dr. Brinckle thought it a first-rate native grape—Dr. Grant had found it perfectly hardy, and stated that it was first discovered in New Jersey, and has been in Ohio some 25 or 30 years. It was added to the list of those that "promise well."

A. Saul proposed the *Rebecca*—it was pronounced tender, because partly of exotic parentage, not intrinsically hardy. C. Downing said it was perfectly hardy, but a moderate grower, and Dr. Grant stated that it had endured three winters, with a portion of intensely severe weather, uninjured. It was recommended as promising well.

Dr. Grant proposed the *To Kalon*. Prince and Hovey could hardly distinguish it from Catawba, and therefore thought not worth while to recommend it. C. Downing said it was quite a distinct grape from the Catawba, and darker and better than either that or Isabella. Dr. Grant said it was wholly different from the Catawba, being "nearly black" in color. A. Saul said it was "black," and thought it better than either of the others mentioned. Dr. Grant thought it one week earlier than Isabella, and C. Downing as ripening at the

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same time as the Catawba. It was left for further examination.

Graham grape, of Philadelphia. R. Buist recommended this, being a pure native sort, while several other of the new Pennsylvania kinds were from the exotic species, or *vitis vinifera*.

Union Village—the character of this was pronounced much the same as that of the Isabella, but a little earlier. It was commended as promising well.

Concord. C. Downing had fruited it and found it about 10 days earlier than the Isabella—Col. Frost of Schuyler county, about six days before Isabella—W. Reid of New Jersey had found it a week earlier, and had formed a more favorable opinion of it than seeing it at Boston. H. E. Hooker of Rochester said that on his grounds it was not so early as Diana, but ripened about the same time as Isabella.

A fact was stated by —— Hanford of Indiana showing the importance of a dry bottom for grapes. On a *porous* soil, vines had withstood 31° below zero, but on impervious subsoil they were killed.

THE FAIRS.—DANE COUNTY.

Our County Fairs are going off bravely on all hands this fall, and showing conclusively that abundance of materials exist among us for the most successful and useful exhibitions, when the people are only thoroughly awakened on the subject and their resources called out. Unluckily they have so many of them come together that we have found it impossible to attend but part of them.

The Dane County Fair, held on the 2d and 3d of Oct., was a fine thing in its way, and much exceeded the most sanguine expectations of those who got it up, in all important respects. It being the first under the organization of the Society, and many of the best workers being strangers to each other, everything did not go quite as harmoniously as may be expected after more experience—although all seemed well pleased, and satisfied, with the movement of things, and all went home determined to come back next year, with more and better articles for exhibition. So may it be. If the FARMER circulated mainly in the county of Dane, we should feel at liberty, and find pleasure in enlarging upon many things, well deserving it; but under the circumstances, and with the report of the State Fair crowding upon us, our numerous friends in Dane must for the present excuse us, with a mere report of the award of premiums, in the most condensed form possible. This much we think we may trespass upon our general readers, considering our very large list of subscribers in Dane County.

PREMIUMS AWARDED.

Thorough-bred Durham and Devon Cattle.

Best durham bull over two years old,
Sewell Nye, $5.
Best durham bull under two years,
Reuben Boyes, $3
Best bull calf,
Stephen Bush Trans. State Ag. Soc'y.
Best durham cow, over 3 years old,
W. A. White, $4
Best durham heifer, under 3 years old,
Stephen Bush, $2
Best devon cow over 3 years old,
B. R. Colvin, $4
Best devon heifer under 3 years old,
E. D. Montrose, $2

Grade and Working Cattle.

Devon and Hereford bull,
W. P. Bentley, $3
Best cow over 3 years old,
Norton Emmons, $3
2d " "
W. A, White, $2
Best cow over 2 years old, $2
W. A. White,
2d best " " "
W. A. White, Diploma.
Grade heifer,
John Jackson, Dip.
Best grade calf 6 mos. old,
R. Boyes, $2
2d " " " "
J. R. Hiestand, $1
6 yearlings,
John Jackson, Dip.
Best working oxen,
J. R. Pierce, Dip.

Horses, Jacks, and Mules.

Best stallion,—Isaac Gregory, $10
2d " Jas. M. Gill, 5
3d " John Ingalls, Dip.
Best pr. all work horses, D. Cody, $7
" " carriage " D. Fitch, 5
Best brood mare, J. V. Cairnes, 5
2d " " M. Wolf, 2
Best span 3 yr old colts, P. M. Pritchard, 3
" 2 " " " J. Brittz, 2
" 1 " " " Jas. Hopkins, 1
Best pr mules, R. Waterman, 3
" sucking mule, D. Palmer, Dip.

Sheep—Spanish Merino and Grades.

Best Spanish buck, A. Cooper, $5
2d " " " A. Chipman, 3
" " ewe " " 2
2d " " " D. J. Powers, 1
Best French buck, E. D. Montrose, 5
2d " " " D. J. Powers, 3
" " grade ewe, E. D. Montrose, 3
2d " " " " J. Seeley, 2
" pen 3 lambs, E. D. Montrose, 2

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Swine and Poultry.

1st Prem.	Suffolk boar,	W. A. White,	2
2d "	"	J. B. Hart,	1
1st "	sow	W. A. White,	1
" "	" and pigs,	B. R. Colvin,	3
" "	Chittagong fowls,	J. Zink,	2
2d "	coop chickens	W. A. White,	1

Farming Implements & Machinery.

1st. Premium	Farm Wagon,—T. Hurfurth,		$2.
"	Fanning Mill, (Dickey's)	S. R. Fox,	2
2nd "	(Ela's)	D. J. Powers,	1
1st "	Horse Rake,—S. R. Fox,		1
"	Ox Yoke,—Tibbits & Gordon,		1
"	Thermometer churn,—S. R. Fox,		1
"	Grain cradle, (Grand de Tour)—Fox,		1
"	Largest lot of Farm Tools,—Fox,		5
"	Corn sheller (Whittimore & Co.) Fox,		1
"	Seed Planter—S. R. Fox,		1
"	Straw and Corn Stalk cutter, (R. Daniels,)—D. J. Powers,		1
"	Self-raking Reaper & Mower, (Seymour & Morgan) P. M. Pritchard,		3
"	Hand-raking Reaper & Mower (P. H. Manny)—A. C. Davis,		2
"	Thresher & Separator (H. A. Pitts) A. C. Davis.		2
"	Breaking plow, (Winchester & De Wolf,	S. R. Fox,	2
"	Stubble plow, "	S. R. Fox,	2
"	Cross plow (Grand de Tour)	Fox,	2

The Judges would also make creditable mention of the following tools exhibited from different manufacturers by S. R. Fox,—not competing for premiums:

Gordon's Straw and Stalk cutter,
Felton's Portable grist mill,
Corn and cob crusher, Star Mill,
Nest of measures,
Self-acting cheese press,
Meat cutter and stuffer,
Post augur,
Wagon jack,
Double shovel corn plow,
Harrow,
Scrapers,
Potatoe digger,
Subsoil and other plows,
Horse hoe,
Pruning tools, bush hook, &c.

Farm and Garden Products & Fruit.

1st. Prem.	for spring wheat,	W. A. White,	$2
2d "	" "	J. A. Paine,	1
1st "	Oats,	J. Rutherford,	2
2d "	"	J. H. B. Matts,	1
1st "	Sand lake potatoes,	J. R. Heistand,	2
2d "	Potatoes,	J. S. Frary,	1
1st "	Seed corn,	J. French.	1
"	Carrots,	Graville & Hall,	1
"	Beets,	J. R. Heistand,	1
"	Cabbage,	Graville & Hall,	.50
"	Onions,	J. French,	.50
"	Squashes,	H. Turville,	.50
"	Apples,	J. French,	3
"	Pears,	J. G. Kanouse,	2
"	Melons,	H. Turville,	1
2d "	"	J. H. B. Matts,	Dip.

The Committee find on the ground a fine display of the following articles, viz: Parsneps, Winter radishes, Cauliflowers, Egg plants, Catawba and Clinton grapes, Buckwheat and Barley. We also notice a stalk of the *Sorgho suere*, or Chinese sugar cane, fully ripe, from the garden of H. A. Tenny, Esq. This plant, it is supposed will compete with the cane of the tropics, in the production of sugar and molasses.

Articles Manufactured in the County.

1st Prem.	Double harness,	T. Chynoweth,	$2
2d "	" "	J. S. Fuller,	1
1st "	single "	T. Chynoweth,	1
"	breaking plow,	Whiting & Haley,	2
"	stubble "	" "	2
"	cast steel saw arbor	W. Skinner,	Dip.
"	Gilt sign on glass,	J. S. Webster,	1
"	Bureau,	O. C. Buck & Co	1
"	Brooms,	Bowen & Ch.	1
"	2 skeleton monuments,	A. Abbott,	Dip.
"	case chemicals,	H. C. Lee & Co,	"
"	Basque,	Mrs. N. E. Cobligh, and Miss I. Osgood,	1
"	Waist, "	" " "	1

Dairy and Household Products.

1st Prem.	Butter,	W. W. Mead,	$2
2d "	"	A. B. Devoe,	1
1st "	Cheese,	R. Waterman,	2
2d "	"	J. Seeley,	1
1st "	Bread, Spr. wh't	S. H. Cowles,	1
"	" winter "	" "	1
"	" corn,	" "	1
"	Crackers,	" "	Dip.

The committee call attention to three cheeses not manufactured in the county, offered by Bowen & Church, and recommend a diploma.

Plowing Match.

1st Prem.	(Plow manufactured by Billings & Carman)	Joseph Fox,	$3
2d "		W. A. White,	2

Ladies' Department.

1st Prem.	Carpet and rug,	A. Fiddler,	$1
"	Pr stockings,	Mrs Whiting,	1
"	Millinery,	R. F. Powers,	1
"	Dress making,	Mrs. Cobligh,	1
"	Gent's shirt,	Mrs. H. Whiting,	1
"	Plain tufted worsted work,	Mrs. Kilgore,	1
2d "	Dress manfd.	Mrs W. W. Mead,	.50
"	Embroidery,	Mrs. Harris,	1
"	"	Mrs. Flowers,	1

Miscellaneous.

1st Prem.	Photographs,	Johnson & Fuller,	$2
"	Ambrotypes,	" "	2
"	Daguerreotypes,	" "	2
"	Drawings in India Ink,	C. T. Flowers,	Dip.
"	Plane irons,	I. Eaton,	"
"	Bird cages,	J. H. Foote,	"
"	Best specimens of Wines & Brandies,	J. H. Foote,	"
"	Brushes, etc,	Wright & Paine,	"
"	Pianos, etc,	C. T. Flowers,	"
"	Variety musical instruments,	D. Holt,	"
	4 best oil paintings,	A. F. Johnson,	"
"	Books & stat.	D. S. Durrie,	"

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	" China ware,	D. C. Poole,	Dip
	" Binding &c,	Maul & Grimm,	"
	" Clothing,	Merrill & Co,	$2
	" Fancy dress g'ds	Geo. Webb & Co.	Dip
	" Silver Ware,	Cook & Belden,	"
	" Boots & shoes,	Fuller & Burgess,	$2
	" Table cutlery,	S. R. Fox,	Dip
	" Saddles,	T. Chynoweth,	"
	" Pastelle drawing,	Mary Rice,	"
	" Monoch. "	Mrs. C. Abbott,	"
	" Cottage chair,	J. W. Hunt,	"
	" Safes,	Adams & Wilson,	"
	" Cook Stove,		"
	Forest Oak,	I. Bonnell,	$3
2d	" stove, Governor,	Adams & Wilson,	1
1st	" Parlor stove,	" "	Dip.
	" Gridiron,	I. Bonnel,	"
	" Lightning rod,	S. R. Fox,	"

P. W. MATTS. President.

H. F. BOND, Secretary.

The Society will report its financial condition as soon as full settlement is made. Meantime all entitled to Premiums can obtain them by calling at our office.

D. J. POWERS, Cor. Sec. and Treasurer.

MORE THAN A MATCH.—A Scotch farmer celebrated in his neighborhood for his immense strength and skill in the athletic exercises, very frequently had the pleasure of fighting people who came to try if they could settle him or not. Lord D——, a great pugilistic amateur, had come from London on purpose to fight the athletic Scott. The latter was working in an enclosure at a little distance from his house, when the noble lord arrived. His lordship tied his horse to a tree, and addressed the farmer: "Friend, I have heard a great deal of talk about you, and I have come a long way to see which one of us is the best wrestler." The Scotchman, without answering, seized the nobleman by the middle of the body, pitched him over the hedge, and then set about working. When his lordship had got himself fairly picked up, "Well," said the farmer, "have you anything more to say to me?" "No," replied his lordship, "but perhaps you'd be so good as to throw me my horse."

TO PRESERVE SMALL FRUITS WITHOUT COOKING.—Strawberries, raspberries, blackberries, cherries and peaches can be preserved in this manner: Lay the ripe fruit in broad dishes, and sprinkle over it the same quantity of sugar used in cooking it. Set it in the sun or in a moderately heated oven, until the juice forms a thick syrup with the sugar. Pack the fruit in tumblers, and pour the syrup over it. Paste writing paper over the glasses, and set them in a cool, dry place. Peaches must be pared and split, and cherries pitted. Preserve in this manner and the fruit retains much more of its natural flavor and healthfulness than when cooked.

A FEARFUL SCENE IN A SCHOOL-ROOM.—The Cleveland Herald has an article stating that great havoc has been committed by dogs among flocks of sheep in different parts of the State. One farmer had 90 killed in one night another lost an entire flock of 30, and so on. The following incident is said to have occurred in the township of Orange.

A middle-sized savage dog belonging to Mr. Honeywell, rushed into the school-house among the children, biting them right and left. One little girl was dragged all around the school-house by the brute, and six children were bitten. One little girl had a large piece of flesh taken from her hip. The children sought refuge under the benches and wherever they could get out of the reach of the dog. A man came with a club to the relief of the children, and killed the animal. The dog, according to the statement of the wife of the owner, had been tied up through the winter and spring of course, because it was a dangerous animal. One of the owner's children were among the bitten. Mr. A. M. Lloyd, from whom we get the facts, was at the spot soon after the occurrence, and the women were cleaning the school-house, and scrubbing the benches, fearing that the dog may have been mad. As the animal was killed, of course it cannot be known whether it was mad, or only naturally savage. The children were under treatment, but of course their friends will suffer under fearful apprehensions for a long time.

HABITS.—Like flakes of snow that fall unperceived upon the earth, the seeming unimportant events of life succeed one another. As the snow gathers together, so are our habits formed. No single flake that is added to the pile produces a sensible change; no single action creates, however it may exhibit, a man's character; but as the tempest hurls the avalanche down the mountains, and overwhelms the inhabitant and his habitation, so passion, acting upon the elements of mischief, which pernicious habits have brought together by imperceptible accumulation, may overthrow the edifice of truth and virtue.—*Jeremy Bentham.*

A ROPE-MAKING MACHINE has been invented by Mr. A. Woodworth, which is destined, doubtless, to work an entire revolution in the process of manufacturing. It occupies a space not exceeding ten feet in length, and manufactures rope three-fourths of an inch in diameter, at a rapid rate. It is complicated in mechanism, and when in motion presents the greatest simplicity of revolutions and counter-revolutions that can be conceived of. [Tenn. Farmer & Mechanic.

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EDUCATIONAL.

For the Farmer.

ALPHABETS.

In the first Alphabets it would seem that each part of the spoken language, each elemental sound, was always represented by a particular character and by that one only. In the Greek Alphabet it appears that the spelling followed every change made in the pronunciation of words for the sake of euphony. But this close relation of spelling to articulate sounds is lost sight of in the English Alphabet. We do not have enough letters, and we make poor use of what we do have. Any candid person, in view of the condition of our orthography, must admit, with the Edingurgh Encyclopedia, that the English Alphabet is "both redundant and defective." Hence follows great labor in learning to spell and read, which is probably rendered no more pleasant or profitable by being placed upon the young.

By the phonetic movement it is intended to remedy the evils, by revising the Alphabet so that each elemental sound shall have a separate character, according to the old method. In the new Alphabet three letters of the old, *c*, *x*, and *q*, are rejected. To the remainder are added twenty others, which in the printed Alphabet bear a general resemblance to the old letters. The script letters of the new Alphabet are the simplest geometrical lines and dots. The reform in printing is termed *Phonotypy*; that in writing, *Phonography*.

With these facts before us, let us briefly examine a few points in an article by A. J. M., commencing on page 316 of the FARMER. In reply to the first paragraph we would say, that the object of the proposed reform is to restore the intimate connection between the written and spoken language. Passing over for the present the effect of this in the written language, we fail to see that the consequences would be otherwise than beneficial to the spoken language. But few of our words have an unsettled pronunciation. As the phonetic Alphabet would always plainly represent the approved pronunciation, it would seem that its adoption would be followed by a much nearer approach to correctness and uniformity in this particular.

In the third paragraph the writer says: "We do not see enough gain in the experiment to counterpoise so great a loss as would be the *written existence* of our language." We suppose to be meant its present written existence, which might be very easily supplied to the curious, the same as is now the old orthography of the earlier English writers. Farther along we find: "But it must be remembered that English orthography will be fully as complicated and difficult to learn, while written forms cannot possibly be reduced more than *one-tenth*." It is not intended by the reform, as we understand it, to condense the written language, although this follows as the result of dropping all combinations and silent letters. The statement contained in the first clause of this quotation is inconsistent with the facts. It is claimed upon the authority of various experiments that under the new orthography the labor of learning to spell almost ceases—that the pupil will learn to read the common print in less time by first learning phonotypy—and that he will learn to read phonotypy in one-fifth of the time required by the old Alphabet.

In the fourth paragraph is the following: "But the same pronunciation will necessarily be employed to express different ideas and relations, which can only be kept distinct by the peculiarities of the written words."

The Romans sometimes meant by the word *amice*, "friendly," and sometimes "friend," yet we presume they had no difficulty in determining in a given case the meaning intended. The English editor of Latin works often assists the tyro by placing a point over the adverb *amice*. Such a plan might be resorted to in phonetic printing, to distinguish the different meanings of words of the same pronunciation.

"All traces of the origin (derivation) of words would be wiped out." We believe that philologists consider the pronunciation of words—better represented phonetically—and their signification as much surer indications of their connections than are their present written forms.

As the different dialects of the "rural shires of England" are chiefly traces of different languages which enter into the composition of the English, they are of no evidence that a more perfect Alphabet would

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occasion diversities of speech among us at present. It is not supposed that the language of the educated man now-a-days betrays his birth place, nor is it at all probable that phoneticians wish to take the standard of pronunciation from him and entrust it to "the careless tongues of the ignorant."

Again, the Greek and Latin languages closely approached a phonetic representation, yet we do not find evidence of "capricious changes" in them. This is better than mere conjecture as a proof that no greater changes would take place under the use of the new Alphabet than there does in the use of the old.

A desire to not occupy too much valuable space forbids our writing any further, though we think that all the conclusions of A. J. M. against the spelling reform may be shown to be as unfounded as those noticed. A Jr.

For the Farmer.

UNIFORMITY OF TEXT BOOKS.

Is a uniformity of text books in our common schools desirable, and if so, is it practicable under our now existing school law? These are questions that present themselves to the minds of many interested in the cause of education. They are also undoubtedly used as foundation for argument in favor of —or in order to carry on some speculative motive. It is possible that some firm of publishers and their agents might declare in favor of uniformity—preach day and night to convince the people of its utility, and still have no other motive than that of gain—the beginning of which they would anxiously look for in the introduction of their particular books, and the exclusion of all others from our schools. Others, perhaps, not having full hope of gaining a perfect monopoly in the book market, and forcing into our schools such works as they publish (and for no other reason than that they publish them,) advocate non-uniformity in text books, and fix up a plausible reason if possible, or one that will make a fair appearance. I do not suppose this to be the case with *all* book agents and peddlers, but on the contrary, there are very many deeply interested in the welfare of our schools.

But we have nothing in particular to do with book agents in the matter of determining whether we will have uniformity or not. The question is whether uniformity is desirable. Is it practicable? This is a subject worthy the consideration of every parent—of every citizen—and the discussion upon this point should come through a careful and unselfish investigation. That a uniformity is desirable, even throughout the State, I firmly believe as yet; but its practicability without change of law, is doubtful. In another number I will endeavor to give some reasons why uniformity is desirable.

O. P. D.

Uniformity in school books undoubtedly is desirable, as far as the nature of things will admit; but perhaps even well informed people will never think just alike on such a subject, any more than on the subject and text-books of religious faith. We don't think legislation can well be used to make people think alike on this subject more than any other. Eds.

Fire Losses.—The immense amount of property destroyed by fire every year in the United States, is without precedence in any other country in the world. According to the record of the Journal of Commerce, in which is only entered those fires where the loss exceeds $10,000, the number of fires from the first of January to the first of September, was 253, involving a loss of $12, 054,000. In the same months of 1855, the amount of property destroyed by fires where the loss of each one exceeded $10,000, was only $9,338,000.

Protecting Dried Fruit From Worms. —Place it in a tin steamer, and set it over a kettle of boiling water; then cover it closely with several folds of flannel or cotton, to prevent the escape of steam. It should remain until thoroughly heated, when it can be put into cotton or linen bags, tied up tightly, and hung in a cool place. Twice in the season, say in May and July, will be sufficient. This method is warranted to be effectual.

Another way is, to set the fruit in a moderately heated oven, until it is thoroughly hot. Care must be taken or it will be scorched.

A Cheap and Efficient Rat Trap.—A good trap may be made by filling a smooth kettle to within six inches of the top with water, and covering with chaff. The first rat gets in and makes an outcry because he cannot get out, and the rest coming to see what the matter is, share the same fate.

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Dr. ATTICHESON ALEXANDER'S SALE OF Short Horns, at Woodburn Farm, Woodford Co., Ky.

The Annual sale of Short-horns and improved Sheep took place on the 3d of September, according to previous announcement.

There was a large collection of people present from Ohio, Missouri and from the stock growing counties of Kentucky. The number was variously estimated at from five to eight hundred, but we should think even the lowest number rather over estimated.

Owing to the short crops this season, the prices paid for stock so fine as that sold, did not reach our expectations. Some of the animals which descended directly from the choicest blood of England sold at fair prices, but others were bid off at much below their real value.

The entire amount of sales was $10,095. —Twenty young bulls, from 8 to 20 months old, were sold for $5,605, ranging from $125 to $805 each. Thirteen heifers, from eight months to two years old, sold for $3,665, ranging from $125 to $600 each. About thirty Cotswold and Southdown bucks and ewes, all from imported stock, were sold for $835, ranging from $10 to $80 each. Mr. Charles Semple, and Mr. A Lowell, and Mr. Harvey Lambe, of Missouri, bought some of the finest animals. The young bull "Patrick," whose name, with the consent of Mr. Alexander, was changed to "Woodford Prince," by Grand Duke, was sold to Messrs. J. & A. Allen, of Fayette Co., Ky., for $805. Gen. L. Deshay, of Harrison Co., bought "Mary Ann," a heifer two years old, for $600.

OHIO STATE FAIR.

A letter will be found in another column from an excellent judge of stock, briefly reviewing the very successful exhibition of our western neighbors week before last. We see it stated that the receipts amounted to $17,000—an extraordinary sum, but, if correct, only showing what can be effected by a little general and united effort, together with an accessible location. The weather was by no means in its favor. The number of entries was quite large—there being of cattle for the Short-horn sweepstakes 109—total of Short-horns 121, of Herefords 4, of Ayrshire 4, of Devons 52, of Oxen and Steers 17, of Fat Cattle 20, of Stock Cattle and Milch Cows 10. Total entry of Horses of jacks and mules 22, of sheep 129, and of swine 58.

CHURNING.—In churning butter, if small granules of butter appear which do not "gather," throw in a lump of butter and it will form a nucleus and the butter will "come."

FACTS, FANCIES, (?) AND A MORAL.

Every one in the least observant of rural afairs, knows, that the rearing of inferior animals generally meets but a sorry return, whether in meats, wool, dairy products, or labor, or in that legitimate gratification which the owner may well feel when driving a beautiful span of horses, or working a good pair of oxen, or showing his herds and flocks to a friend. The growers of high-bred animals, with tolerable management, are sure to be better paid; and they are approaching a result, which, however favorable it may be to themselves, will benefit the country still more. That generous rivalry existing between the farmers of Ohio and Kentucky, as to who shall have the best stock, will be worth more millions to the country than they have yet bred fine animals. And every successful breeder may well enjoy the reflection, that he is benefitting his own region more than himself. To gain wealth by impoverishing others might satisfy baser minds: to gain it in a way that is conducive to the general wealth, would better satisfy a liberal mind; and this, we undertake to say, every honorable and successful breeder of improved stock is doing. If he is doing well for himself he is doing better for the community; and every generous man will wish him success. These are *facts*.

It is now pretty generally believed, that by selecting pure bloods for parents, by pairing them judiciously, and by attending rationally to the natural wants of the parents and their young, you may succeed to a degree that in other times would have been deemed miraculous, in rearing fine animals, making them perfect in form, moderate in the consumption of food, mild in disposition, docile, intelligent, (?) almost human. Some have supposed that if the human race were guided more by reason, and less by passion—that if they were to exercise about half as much discretion for a similar object, as the skillful breeder of cattle exercises in his vocation, there would be a wonderful improvement—that symmetry, beauty, perfection of form, and the corresponding intellectual forms would be more common, and that man would more readily comprehend and seek the true end of his being—would become more prudent, wiser, more elevated in his aspirations—Almost divine. Set these *notions* down for no more than they are worth, if they are *fancies*.

But who would not regret that the race should deteriorate for the lack of a moiety of that good sense employed by the cattle grower, in training the young to a sound and healthy physical condition, by suitable modes of dress, by food convenient to the age, by plenty of romping recreations, by

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work suitable to both sexes, by riding horseback, and by out-door employments, or out-door amusements? We have been led to these remarks, so far as they relate to the human species, by an eloquent passage from Dr. Oville Dewey, which we give below, and in which the attentive reader will find our *moral*.

"I must add a word upon our modes of dress. With a climate twice as trying as that of England, we are, on this point, twice as negligent. Whether there is actual violence done to the form in the absurd attempt to make it genteel, I will not undertake to decide; but certainty the bust of an English woman shows that it never was, and never could have been, subjected to those awful processes of girting, which must have been applied in many cases to produce what we see among us. At any rate the fearful prevalence of consumption in our country is an admonition of our duty on this subject of dress, that ought not to be disregarded. And especially in a country where no limits are set to fashionable imitation—where a man is very liable to mistake upon the door-step his domestic for his wife or daughter—this is a subject that comes home to every family, whether low or high, and comes, too, in the most palpable forms of interest—in the suffering and expense of sickness, and in the bitterness of bereavement.

"But consumption and death are not the only alarming forms in which the subject of female health presents itself. Let any one look at the women of America, and, with all their far-famed delicacy and beauty, let him tell me what he thinks of them, as the mothers of future generations. What are the prospects of the national constitution and health, as they are to be read in the thousands of pale faces and slender forms, unfit for the duties of maternity, which we see around us? Let any one go with this question to their nurseries, and he will see the beginning of things to come. Let him go to the schools, and he will turn over another leaf in the book of prophecy. Oh! for a sight, at home, of the beautiful groups of children that are constantly seen in England, with their rosy cheeks and robust frames!" [Plow, Loom and Anvil.

THE WHEAT CROP OF FRANCE.—The annual crop of wheat in France is estimated at 198,000,000 bushels, which leaves a surplus, after supplying the home market, of five or six million bushels for export. Last year the crop in France was so short that no French wheat was exported, but on the contrary, several million bushels imported.—This year the crop is again estimated to be from fourteen to twenty-eight million bushels short. [Hunt's Mer. Magazine.

DISCLOSURES OF A LIQUOR DEALER.

Mr. Delavan, president of the New York State Temperance Society, in his recent address in the capitol in Albany, dwelt mainly on the now prevalent adulteration of liquors.

Within a few weeks, he said, it has become to my knowledge, that a person whose conscience revolted at his employment in a large liquor establishment, has left it for a more innocent and creditable business. He stated that it now took only ten—some say four gallons of pure whisky—to make a barrel of the whisky of commerce. To these are added rain water, camphene and arsenic; the latter to restore the bead destroyed by water.

He stated also, that brandy made to imitate the real French brandy, and of the most poisonous character, was sold at $4 per gallon, costing only 22 cents. That all kinds of wines were imitated so closely that the best judges could not discriminate; costing but a trifle, and sold at prices to suit customers.

The higher the standing of the customer, and the more particular as to his wines, the higher the price, to satisfy him as to quality. The most celebrated European dealers were given, as to the source of supply; and European dealers, be it known, are not much behind, but much in advance of the American trader, in their adulterations.

He quotes an advertisement from a chemist in New York, who is "now prepared to furnish the flavorings for every kind of liquor."

SUCCESS prompts to exertion, and habit facilitates success. Habit also gives promptness, and the soul of dispatch is decision. One may write a book or make a picture, while another is deliberating about a plant or a title-page. The more we do, the more we can do. If we go forward with spirit and confidence, we shall succeed. The best are idle half the time, and he who does nothing renders himself incapable of doing anything, while capacity is invigorated by occasions of necessity. Our expenditure of intellectual wealth makes us rich, and we acquire ideas by imparting them.

BREAKFAST DISH.—Take one egg and beat it up, add a teaspoonful of salt, pour in about two-thirds of a pint of water, then slice some bread, dip it in, and fry in a little butter. Serve warm, and you will find it an excellent dish.

The gold fields of Australia are yielding at the rate of nearly $100,000,000 per annum and the produce of the first 3 months of 1856 is nearly double that of the first three months of 1855—being nearly 700,000 ounces.

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THE STATE FAIR.

The State Fair came off on the 8th, 9th and 10th of October, and on the whole was a pretty good thing of the kind, exceeding in many respects what its most sanguine friends expected, and falling short in some other particulars considerably of what could have been wished.

The distance of the grounds from the city was rather a damper upon many of the country people in reference to going, and equally so upon the turning out of city people, only a small number of whom visited the grounds at all, except on the afternoon of the trotting match. Still, all in all, there was a large number of people visited the grounds considering the circumstances—probably not less than 15,000 during the three days, and perhaps 20,000. The weather was on the whole remarkably fine, altho' the dust became extremely troublesome before the close.

The spirit and enthusiasm manifested on all hands in agricultural enterprises was decidedly flattering. We heard no one grumble about the low price of wheat; but all seemed intent on being pleased with themselves and others; consequently all was cheerfulness and good nature, bustle and activity among the crowd, who were altogether a fine specimen of Western people, generally young or middle aged, sober, civil and obliging. We did not see but one or two men the worse for liquor during the entire show, and they were not badly so either. That portion of community who drink liquor and *Lager* don't take much interest in agricultural shows. (They probably patronized the Bull and Bear Fights that came off on Saturday after the close of the Fair; every class have their amusements.) The show of animals and articles was good, though not so large by considerable as it would have been if a misunderstanding had not arisen about the freight on the Railroads. The Agricultural Society supposed they had made a reliable arrangement with R. R. Companies to carry stock and articles free; but on the eleventh hour at night, and after it was too late to remedy, it was discovered that a misunderstanding existed between the Society and Company, which greatly disappointed many who had arranged to take in their stock. In fact, numbers actually drove home again, thereby materially diminishing the display. We don't pretend to say whose fault it was, but this much we do say, that State Fairs cannot be successfully held without the utmost liberality on the part of Railroad companies. Farmers will not take their fine stock to Fairs at any considerable expense, simply for the sake of showing it, and the same of other things. Railroad managers must understand that nobody has a greater interest in the rapid and healthy development of the country than themselves, and that a liberal policy in these matters is by far the most profitable to them in the long run, and not a very long run either. These public shows are affairs that don't pay everybody, except in their general effects, and nobody is a greater gainer from those general effects than such companies. Hence we say that we don't think we are asking too much of Railroad or Steamboat Companies, once a year to carry articles to Fairs free, and passengers at half price and with the best possible accommodations at that. We think they owe that much to the public, as a fair exchange for a thousand special favors granted them by Legislatures and otherwise, and that they also owe it to their own true interests.

We believe it is an almost universal practice in other States, and know it must be here, or Fairs will dwindle down to mere horse races and bull fights, and agricultural progress will stand still, and Railroad earnings will not increase.

ENTRIES OF ANIMALS AND ARTICLES.

We had intended to publish a complete list of all the entries in its proper order, but find ourselves without a complete copy at the moment we need it, and too late to get it for this number. It will probably appear in the next. The following is a synopsis of the main features in the cattle, horse and sheep departments:

CATTLE.

DURHAMS.—This class embraced upwards of sixty head, and many of them very fine. The bulls of Messrs. Paddock, Knight, Rowe, Ewing, and others, were among the best, and could hardly avoid premiums. The same may be said of many of the cows and heifers. We would like to refer to many of them individually, and mean hereafter to do

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so, when time and space permits.

DEVONS.—The show of this kind of stock was also large, embracing over sixty head, and remarkably good. The herds of the Messrs. Caprons, of McHenry Co., Ill., and of Mr. H. W. Washburn, of Otsego Co., N. Y., were preeminently fine; though not better than numbers of individual animals owned by the people of our own state. Mr P. S. Carver of Delevan, Mr. Eldred of Elkhorn; Mr. Rogers, of Burlington; and Mr. Harvey Durkee, and Bond, of Kenosha, exhibited some of the best.

There were some good crosses, and also of natives and grades, to which we cannot now refer. The entire entries of cattle exceeded two hundred head, and of sheep about the same number.

HORSES.

The show in this department was tolerably large, there being something over 100 in all, many of them as fine as could be wished. It struck us that the mere "fast horses" preponderated too largely over those of greater usefulness. Utility should be our first object instead of fancy. The horse seems to be the idol of many men, and they often show it quite too plainly on such occasions. The Black Hawk stock seemed to predominate among the fancies.

We hope to have engravings furnished us, by the enterprising owners of some of the fine horses and cattle for publication in subsequent numbers, when we can speak at length of their merits.

AGRICULTURAL IMPLEMENTS AND MACHINERY,

We will refer to more at our leisure, that we may do the subject better justice than we now find opportunity. We deem it one of the leading interests in all exhibitions of this kind, and shall not omit in the end to do it full justice. The same also of the Manufacture, Dairy and Floral Halls.

The list of premiums awarded we give below in full. Doubtless some mistakes may have occurred in names, and may be items, any of which we shall be happy to correct when apprised of them.

PREMIUMS AWARDED AT THE ANNUAL STATE FAIR,

Held in Milwaukee, Oct. 8th, 9th, and 10th, 1856.

[These premiums will be paid at the office of the Milwaukee Mutual Insurance Company, Martin's Block, East Water St., until November 1st. Afterwards at the Society's Office in Madison. The Diplomas will be handsomely framed, and subject to the order of the owners after 30 days.

Class A, No. 1—DURHAM CATTLE.

Best bull, 3 yrs and over, W. Knight, Alto, ... $15
2d best do, George Paddock, Milwaukee, ... 10
3d do do J. P. Rowe, Muskego, ... 5
Best bull 2 yrs. B. Granger, Lebanon, ... 10
2d do do Fearnly & Ewing, La Grange, ... 7
Best 1 yr old do, F B Ellsworth, Rosendale, ... 7
2d best do, P W Stewart, Eagle 5
3d best do, J B Dousman, Milwaukee 3
Best cow, 3 yrs old and over, J'H Rogers, Mil. ..... Dip
3d best do, A M Perry, Troy 10
3d do do, J B Dousman, Mil. 5
Best 2 yr heifer, H D Eighme, Mt Pleasant, ... 10
2d best do O G Ewing, La Grange, ... 7
3d best do, J B Dousman, Mil. 5
Best 1 yr old heifer, S S Rogers, Burlington, ... 7
2d best do, J B Dousman, Mil. 5
3d do do J P Rowe, Muskego, ... 3
Best heifer calf, G J Rogers, Mil. 5
2d best do, B Granger, Lebanon, ... 3
Best bull calf, E H Ball & Co., East Troy, ... 5
2d best do, J H Rogers, Mil. 3

Class A, No. 2—DEVONS.

Best bull, 3 yrs old and over, P S Carver, Delavan, $15
2d best do, O Eldred, Elkhorn, ... 10
3d best do, J Bond, Kenosha, ... 5
Best 2 yr old bull, S S Rogers, Burlington, ... 10
Best cow, 3 yrs and over, H Durkee, Kenosha, ... 15
2d best do, do same, ... 10
3d best do do S S Rogers, Burlington 5
Best heifer calf, H Durkee, Kenosha, ... 5
2d best do, S S Rogers, Burlington, ... 3
Best bull calf, same, ... 5

HEREFORDS.

Best 1 yr old bull, A H Medbury, Eagle, ... $7

Class A. No. 6—CROSSES OF BLOOD CATTLE.

Best bull, 3 yrs and over, S W Benson, Bloomfield, $15
Best do, 1 yr, O P Dow, Palmyra 7
Best cow, 3 yrs and over. W C Chapin, Mukwonago, 15
Best 1 yr old heifer, J & F Layton, Mil. 7
2d best do, M W Williams, Lake, ... 3
Best bull calf, J Moore, Waukesha, ... 5
2d best do, T McDonald, Wauwatosa, ... 3
Ditto discretionary, J & F Layton, ... 2

Class A, No. 7—NATIVE AND GRADE.

Best cow and calf, O G Norton, Tomah, ... $6
Grade do, R W Parker, Wauwatosa, ... 3
Best grade cow, 3 yrs and over, J Fearnly, La Grange, 10
2d best do do do same, ... 5
Best grade heifer, W A White, Madison, ... 7
Best do 1 yr, J Fearnly, La Grange, ... 5
Best heifer calf, B Brazee, Wauwatosa, ... 3
2d best do, O Norton, Tomah, ... 2
Grade bull, 4 yrs, L Landon, Waupun, ... 5

Class A, No. 8—WORKING OXEN.

Best yoke of steers, 3 yrs, E T Sercomb, Wauwatosa, $10
2d best do, J B Dousman, Mil. 5
Best yoke working oxen, L Rawson, Oak Creek, ... 10
2d best do, J H Leonard, Oak Creek, ... 7

Foreign Stock—DURHAMS.

Best bull, 3 yrs old and over, R Ray, ... $10

DEVONS.

Best bull, 3 yrs and over, H W Washburn, N. Y., Dip
2d best do, R C Ellis, ... 10
Best bull, 2 yrs, H Capron, Alden, Ill, ... Dip
2d best do, H W Washburn, N Y, ... 7
Best bull, 1 yr, same, ... Dip
Best bull calf, H Capron, ... Dip
2d best do, H W Washburn, ... 3
Best cow, 3 yrs and over, H Capron, ... Dip
2d best do, same, ... 10
Best heifer, 2 yrs, same, ... Dip
2d best do, H W Washburn, ... 7
2 yoke North Devon steers, and 2 do oxen, discretionary premium of $50, and highly recommended for size and beauty.

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Blood Horses.

Class A, No. 11.—(None!)

Morgan and Black Hawk Horses.

Class A,—No. 12.

Best Black Hawk stallion, J Gale, Merton,..... $20
Best Black Hawk stallion, 3 yrs, S Whitman,..... 10
2d best do, 5 yrs, T Marshall, Oak Grove, ... 15
Best Morgan do, F M Wheeler, Springvale, ... 20
2d best do, H Chase, Mil. 15
B H stallion, G Paddock, Mil., commended for p. of 5
Do, M S Cotton, Racine, do do 10
Do, D S Foote, Merton, good horse but too late for competition,.....
Black Hawk and St Lawrence colt, E H Keith, Hartford, Ohio—good horse.

Class A, No. 13.—Carriage Horses and Horses for all Work.

Best matched car. horses, J C Starkweather, Mil... $25
2d best do, C H Porter, Mil. 15
Best mare for all work, J Frazer, E Troy, ... 10
Best gelding, do T Stevens, Beaver Dam, ... 10
2d best do, E Chase, Mil. 5
Best pair of matched horses for all work, A Schultz, Watertown, ... 15
2d best do, P M Perkins, Burlington,..... 10
Best stallion, 4 years old, for all work, *Eclipse*, W S Gurnee, Chicago, Ill. ..... Dip
2d best do, J W Rhodes, Kenosha, ... 15
Best do, 2 yrs old, W G Benedick, Madison,..... 10
2d best do, C F Wilcox, Janesville, ... 5
Best stallion 2 yrs, (all work,) J Wylish, Waukesha, 7
2d best do, J P Lapham, ... 5
Bay colt, 3 yrs, A J Cole, Waukesha, ... Dip
(This horse, sired by *Niagara*, was entered improperly, owing to an error, and did not come under the observation of the judges till the premiums had been awarded, otherwise he would have taken the first premium.—*Judges' Notes.*

Class A, No. 14.—Mares and Colts.

Best brood mare and foal, A W Wright, Waukesha, $10
2d best do, N A Walker, Mt Pleasant,..... 5
Best mare, 3 yrs, J H Rogers, Mil. 10
do do 2 yrs, C H Larkin, Mil. 8
Best do, 1 yr, N A Walker, ... 5
2d best do, D Merrill, Brookfield, ... 3
2d best colt, 1 yr, E Trowbridge, Greenfield, ... 3
Best Morgan stallion colt, 2 yrs, (dis.) A P Lyman Sheboygan, ... 8
2d best stallion, 2 yrs, J Wylish, Lisbon, ... 5
Best horse colt, 1 yr, C B Stockton, Mukwonago, ... 5
2d best do, D Merrill, Brookfield, ... 3
3d best do, 2 yrs, J A Bell, Greenfield, (dis.)..... 2
Best gelding colt, 2 yrs, L Trimbor, Mil. (dis.) 8
2d best do, J A Blanchard, Wauwatosa,..... 5
2 brood mares and foals, D Merrill, Brookfield, worthy mention.

Class A, No. 12.—Jacks and Mules.

Best span of mules, T C Dousman, Ottawa,..... Dip

Sheep—Long Wool, Middle Wool, Leicester and their Grades.

South Downs.

Best buck, over 2 yrs, J & F Layton, Mil..... $10
2d best do, A P Lyman, Sheboygan, ... 7
3d do, Z B Wakeman, Beloit,..... 5
Best do, 1 yr, same, ... 6
Best pen of 3 buck lambs, A P Lyman,..... 5
do do ewes, same,..... 10
do do ewe lambs, same 5
2d best pen 3 ewes, S S Rogers, Burlington 7

Leicester.

Best buck 2 yrs and over, J & F Layton, Mil..... $10
2d best do, L Rowson, Oak Cor.,..... 7
3d do E Ward, Jefferson, ... 5
Best buck 1 yr, J & F Layton, Mil..... 7
2d best do, T K Carr, Oak Cor,..... 5
3d do, R Bagg, Eagle, ... 3
Best pen of 3 ewe lambs, same, ... 5
Do 3 buck do, T K Carr, Oak Cor.,..... 5
Do 3 ewes over 2 yrs, L Rawson, do,..... 10
2d best do, R Bagg, Eagle, ... 7
3d do do, same, ... 5
2 ewes highly commended, E Ward, Jefferson.
Best pen 3 fat sheep, L Rawson, Oak Cor.,..... 10
Do do, 3 grade ewes, T K Carr, do, ... 7
Do do 3 grade buck lambs, J & F Layton, Mil..... 5
2d do, 3 grade ewes do, L Rawson, Oak Cor.,..... 3

Class A No. 17—French Sheep and their Grades.

French.

Best buck 2 yrs, P M Perkins, Burlington,..... $10
2d do, P F Boss, North Prairie, ... 7
3d do, E T Cogswell, Brookfield,..... 5
Best pen of buck lambs, J Moore, Waukesha, ... 5
2d best buck lamb, F M Jenks, Summit, ... 3
Best pen of ewes, 2 yrs, P M Perkins, Burlington,.... 10
2d best do, F M Jenks, Summit,..... 7
3d do E T Cogswell, ... 5
Best pen of ewes, 1 yr, F M Jenks, ... 7
(Two full blood imported bucks, and 5 ewes, by White and Jennings, Gaines, N. Y., are commended to special notice.)

French Grades and Crosses.

Best pen grade buck lambs. J H Bevier, Brookfield, $5
2d best do, J Moore, Waukesha, ... 3
Best do ewe do, same 5
2d best do, F D Weld, Greenfield, ... 3
2d best cross buck, 2 yrs, same, ... 7
Best Spanish cross. 1 yr. J N Cadbey, Merton, ... 7
2d best do, J Gale, Merton, ... 5
Fr. and Span. buck lamb, worthy of mention, J Gale.

Class A, No. 18.—*Spanish.*

Best buck 2 yrs, H Hemenway Whitewater,..... $10
2d do T C Dousman, Ottawa, ... 7
3d do R T Graves, Rondolph, ... 5
Best buck 1 yr, T C Dousman,..... 7
2d best E C Cogswell, Brookfield,..... 5
Best pen buck lambs, T C Dousman, ... 5
2d best do, H Hemenway 3
3d best do, C A Lewis, Ottawa 2
Best pen ewes 2 yrs, same, ... 10
2d do, H Hemenway, ... 7
3d do, R T Graves 5
Best do 1 yr, same 7
2d do, T C Dousman,..... 5
3d do, R T Graves, ... 3
Best pen of ewe lambs, T C Dousman, ... 5
2d do, E C Lewis, ... 3
3d do, H Hemenway, ... 2

Class A, No. 22.—Swine.

Best boar 2 yrs and over, (Suffolk,) J A Carpenter, Waukesha, ... $10
2d best do, H Beckwourth, Oak Creek, ... 7
Essex boar, 5 mos. fine and worthy of special notice, and a fine sow pig 4 months old of the same breed, A G Hanford, Waukesha,..... 5
Best breeding sow and pigs, L P Potter, Wauwatosa, 10
Fine Suffolk sow and pigs, J A Carpenter, Waukesha, dis. 5

Trotting & Road Horses—Trial of Speed.

Distance 1 mile.—All Stallions.

Time,
Billy McCracken, O C McCracken, ... 2.49
1st premium, $100.
Green Mt Boy, W. L. Utley,..... 2.57
2d premium $50.
Niagara, J Guild, ... 2.58
Yankee Bill, R E Jones, ... 2.58
3d premium, $25, divided between the last two.

Five Year Olds.

Black Weasel, J H Hall, ... 3.07
(Complaint was made that this horse had not been kept for a stock horse as required, and premium was withheld.)
Black Hawk, Ketchum & Linsley, ... 3.13
premium $25.

Mares and Geldings.

Ch mare, *Lady Worthley*, A Proudfit, ... 2.46
1st premiums $25.
Bay g. *Chieftain*, S Morse, ... 2.46
2d premium, $15.
Bay g. *Jack Rossiter*, O W Dimmick, ... 2.54
3d premium, $10.
Ben Bolt, to wagon, E Goodrich, ... 3.05

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Matched Team.

Reel and Fashion, O W Dimmick, ... 3.21
1st premium, $50.

Class A, No. 23.—Poultry.

6 Bantam fowls, J Bell, Wauwatosa, ... $2
Best Shanghais, J A Carpenter, Waukesha 2
2d best do, disc. same 1
Best lot of chickens, same, ... 1
do do turkeys, R Strong, ... 2
3d best, game fowls, imported pullets, and 1 cockerel, dis.
Greatest variety of fowls, A Sawyer, Mil. 5

Class B, No. 24 and 25.—Farm Implements.

Best Horse power Thresher and Separator, lever, J I Case, Racine, dip. and $5
Best horse power, tread, W D Bacon, Waukesha, .. Dip
Corn planter, horse, J S Delano, Ripon, ... 3
Best do, hand, C C Church, Rockton, Ill. 3
Best portable grist mill, Nichols, Bacon & Co. Wau. 5
Best corn and cob crusher, W D Bacon, Waukesha, 3
Best straw and stalk cutter, horse and hand, S R Fox, Madison, ... 5
Best corn sheller, hand A P Dickey, Racine, ... 3
do do horse. Vose, Mitchel & Co., Mil. 5
do single harness, C Smith, Mil. 5
do wagon do W Emigh, Mil. 5
do 1-2 doz hand rakes, H Gates. Janesville 1
do do pails, Daggett & Rice, Mil. 1
do do same, dis. 1
do nest of tubs, same 3
do vegetable cutter, Vose, Mitchel & Co. Mil. 3
do planter and broadcast sower, dis. H Boutwell, Racine, ... 3
Best mower and reaper, Manny's, Vose, Mitchel & Co, Mil. ..... Dip
Best cheese press, same, ... 2
Improved fanning mill, same, worthy of mention.
Best reaper and self-raker, dis., S L Sheldon, ... Dip
Best portable wood sawing machine, W D Bacon, ... 3
Two horse power improved, H D Emery, Chicago, .. 3
2d best sweep horse-power, threshers and separator, an excellent machine, entitled to favorable notice, M & M Stone, Mil. 5
Best farm wagon, E Bain, Kenosha, ... Dip
(The Judges decide that wooden axles are better than iron for farm wagons.)
Best wagon, iron axle, J Esch, Mil. 6
do breaking plow, J Hitchcock, Kenosha, ... 5
do sod plow, same, ... 5
do stubble plow, same, ... Dip
2d best breaking plow, Eldred, Barrows & Co., Janesville, ... 3
2d best sod plow, same, ... 3
2d best stubble plow, same, ... 3
Best deep tiller, same, disc. 5
Best clover huller, G S West, Mil., ... Dip
do churn, Lefevre & Greene, Mil., ... 2
do portable saw mill, Stowell & Co., Milwaukee, Diploma and 10
Best pump for farm use, worked by a self-regulating wind-mill, entitled to first premium, eminently worthy of the attention of farmers. 5
Best fanning mill, P W Dickey, Janesville, dip. and 5
(All on exhibition were good and worthy of attention, particularly those of A P Dickey, of Racine, and R E Ela & Co.'s of Rochester.)

Class B, No. 26.—Dairy.

Best 25 lbs. butter, made at any time, F D Weld, Greenfield, set of spoons worth, ... $7
2d best do, H B Trowbridge, Burlington, ... 5
3d do. R Strong, Greenfield, ... 3
Best 25 lbs of butter, June, Mrs. E M Danforth, Summit, set spoons, worth 10
2d do, F D Weld, do, worth 7
3d do, J C Bishop, Fond du Lac, ... 5
Best single cheese, W C Chaffin, Mukwonago, ... 3
do lot cheeses, H B Trowbridge, ... 10
2d do, M Jones, Ft Atkinson, ... 7
3d do L Rawson, Oak Creek, ... 5

Class B, No. 27.—Hives and Honey.

Best box of honey, Kennedy & Read, Mil., ... $3
Best hive, H R Leech, Eagle, (S Davis,) 2
Bee hive and moth killer, R C Otis, Summit, ... 2

Class B, No. 28.—Farm and Garden Products.

Best sample of winter wheat, J N Cadby, Merton, ... $3
2d do, O S Rathbun, Brookfield, ... 2
Best sample spring do, T C Dousman, Ottawa, ... 3
2d do, D Merrell, Brookfield, ... 2
Best Rye, G P Peffer, Pewaukee, ... 2
2d do, R Strong, Greenfield, ... 1
Best oats, T C Dousman, ... 2
2d do, G P Peffer, ... 1
Best peas, same, ... 2
Best and greatest variety of garden vegetables, same, 7
2d do, H Kroeer. Mil. 5
Best seed corn, G P Peffer, ... 2
do 1-2 bushel rutabagas 1
Best barley, J N Cadby, Merton, ... 2
Best buckwheat, T Blood, Vernon, ... 2
2d do, N H Cook, Wauwatosa, ... 1
Best sample millet, A G Pierce, Pewaukee, ... 2
Best 1-2 peck of peppers, do, ... 1
Best beans, R Strong, Greenfield, ... 2
2d do, S Squires, ... 1
Best and greatest variety of potatoes, R W Parker, Wauwatosa, ... 5
2d do, M L Burdick, Lake, ... 3
Best do, squashes, J Scott, Raymond, ... 2
2d do, D McEvoy, Wauwatosa, ... 1
Best do, pumpkins, L Rawson, Oak Cor., ... 2
2d do, J C Howard, Lake, ... 1
Best 12 ears seed corn, J A Blanchard, Wauwatosa, .. 1
Best and greatest variety do, J Near, Raymond, ... 1
do 12 beets, O S Rathburn, ... 1
do peck sweet potatoes, T Howland, Pleasant Prairie, ... 1
2d best do, J S Wilcox, Lake, ... 50
Best pk onions, J Sanderson, Westport, ... 1

Class C.—Domestic Manufactures.

2d best 10 yds of flannel, S Squires, ... 2
do cotton hose, F D Weld, Greenfield, ... 1
do hearth rug, Miss R McFarland, Waukesha, ... 2
Best 10 yds rag carpet, Mrs. Newcomb. Whitewater, 4
2d do, Mrs. A B R Hull, Summit, ... 2
2d do pr men's socks, Mrs. Danforth, do 50
Best woolen yarn, C A Lewis, Ottawa, ... 2
2d do, B F Crain, Waukesha. 1
Best pr fringe woolen mittens, S Henry, Cold Spring. 2
do socks (disc.) same, ... 1
Best pr woolen hose, Mrs. Gilman, Racine, ... 2
2d do do. Mrs. O Gardiner, Oconomowoc, ... 1
Best wrought bed spread, Mrs. Boss, N Prairie, ... 2
do white quilt, Mrs. C Bartlett, Berlin, ... 1
do patch do, Mrs J H Briggs, Wyocena, ... 3
2d do, Mrs. C Kingsley, New Berlin, ... 2
Best knit counterpane, Mrs E Fox, E Troy, ... 1
do silk patch quilt, Mrs W Johnson, Mil. 1
do worked handkerchief, Mrs Child, Lisbon, ... 3
2d do, A McNab, Mil. 1
Best worked collar, Mrs Levy, do, ... 2
2d do, Mrs P Young, do, ... 1
Best silk embroidery, Mrs Levy, ... 3
do fancy needle work, Mrs Louis, Mil. 2
do knit tidy, Mrs Gilman, Racine 2
2d do, Mrs O Gardener, Oconomowoc, ... 1
Best worsted work, Mrs I F Clark, Kenosha, ... 3
do pr embroidered slippers, do 2
do wax fruit and flowers, same 3
do artificial flowers other than wax, do 3
do shellwork, do 2
do hair wreath, do 1
2d best worsted work, Mrs Squires, Greenfield, ... 2
Best embroidered cover, Mrs F H Pitman, Mil. 2
2d best silk embroidery, Mrs. A Proudfit, Madison, .. 1
Honiton lace, Mrs Ellis, Mil. 3
Best wax flowers, Mrs Olin, Mil, ... 3
Floral design, J Bell, Wauwatosa, ... 10
(No other premium offered in the horticultural department; as these exhibitions form an attractive feature in our fairs, the committee recommended the following:)
Best collection green house plants, J B Dunlap, Mil. 5
do boquet, same, ... 3
2d best collection verbenas, same, ... 1
2d best bouquet, T Hinlop, Mil. 2
Best collection verbenas. J Bell, ... 2
do cut roses, same, ... 2
Rustic vase, same, ... 3
Best grass bouquet, Miss S Murphy, ... 3
Italian lustre paintings, Mrs. I Clark, ... 3
A case of wax work, Mrs. A C Barry, Racine, ... 2

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Class C, No. 32.—Manufactures other than Domestic.

Best piece of satinet, G H Stewart, Beaver Dam, Diploma and $5
do 8 do, cassimers and sheep's gray, same, ... Dip
21 yds white fulled flannel, wool from Edgerton & Paddock, W Burke, Mil., Dip. and 5
Black cassimere very fine, and 2 pieces tweeds. P M Perkins, Burlington, Dip. and 5
Best pair of blankets, J Dawson, Madison, ... 3
15 lbs sorted yarn, Keuhn, Esch & Co., Dip. and 2

Class C, No. 33—Paintings, Ambrotypes. Daguerreotypes and Photographs.

Oil painting, Fowler & Horn, Mil. ..... Dip
Painting, water colors, Miss J H Johnson, Mil. 5
2d best do. C Reuter, Mil. 3
Do, worthy of notice, R C Carter, Ripon.
Best crayon drawing, Miss Johnson, Mil. 5
2d do, Mrs I E Clark, Kenosha, ... 3
Best daguerreotype, H S Brown, Mil. 5
do plain photographs, same, ... 5
2d best ambrotypes, same, ... 3
2d best daguerreotypes, Johnson & Fuller, Madison, 3
Ambrotypes, same, Dip. recommended.
Best Ambrotypes. Ford and Seeley, Mil. 5
2d best plain photographs, same, ... 2
Best colored photographs, Johnson & Fuller, Madison, 5
2d do, Fowler & Horn, Mil., ... 3

Class C, No. 34. Bookbinding, &c.

Best plain and ornamental printing, C Holt, Janesville, ... Dip
Superior specimens do, Starr & Son, Mil. 5
Best bookbinding, C S Boynton, Racine, Dip. and ... 3

Stoves, Cutlery and Silver Ware. Class A, No. 35.

2d best cooking stove, G P Howitt O Son, ... 3
Best parlor do, same, ... 5
Best cooking stove, H W Goodrich & Co., ... 5
2d do parlor do, same, ... 3
Best hall stove, same, ... 5
2d do, same, ... 3
Samples of hollow ware, same, ... 3
Best Argentine ware, Blair & Persons, ... 5
Best plated ware, H W Goodrich & Co., ... 5

Miscellaneous and Discretionary. Class C, No. 36.

House furnishing goods, G L Davis, Mil., Dip and $5
Samples of engraving, P L Mossin, ... Dip
Paper hangings, Ford & Fairbanks, ... Dip
China and glass ware, Elmore & Co., ... Dip
Portable steam engine, Mensel & Stone, Mil., Dip and 10
Mathematical instruments, E Frank, Mil., Dip and 3
Stuffed birds, E C Springer, Mil., ... 2
Carving in wood, N Lorenz, Mil., Dip and 1
Best hats, caps and furs, Salsman & Booth, ... Dip
Best lightning rods, C L Herring, Mil., ... Dip
2d do, D Walt, Mil., ... 1
Best iron safes, Berliner & Bruno, Mil., Dip and 5
Best bank lock, do, ... Dip
Shingle machine, L A Roberts, Carthage, N. Y., ... 3
Peckham's cauldron furnace, L Bonnell, ... 1
Fairbank's scales, same, ... Dip
Best collection paper hangings, Fox & Crosby, Mil., Dip
Specimen of paper work, fancy table, J J McGrath, Dip
India ink drawings, E T Mix, ... 1
Guns, pistols and fishing tackle, A H Gardiner, ... Dip
Men's overshoes, Griswold & Bircham, Racine, ... Dip
½ doz. calf skins, same, ... 3
do kip skins, same, ... 3
Assortment dom. manufac'd boots, Atkins & Steele, Mil., ... Dip
Lefevre & Greene, for 2 harrows, ... 2
do 1 morticing machine, ... 1
Case hats, caps and furs, Throop & Bro., ... 3
Vose, Mitchell & Co., Mil.:
Potatoe digger, $1; meat cutter $1; sausage stuffer, 50c; saw and chisel, 50c; 3
Sewed water proof boots, H. Freeman, ... 1
Pressed brick, Besley, Watkins & Co., ... Dip
Spoke machine, Snow & Williams, ... Dip
Variety of ladies bonnets, G O'Dea, Janesville, ... Dip
3 leather work frames, C A Buttles, ... 3
do flowers, do 2
2d best combination bank locks, Schumacher & Johnson, Mil., ... 10
Silver plated door plates, same, ... 1
Plated knobs, same, ... 1
2d best iron safes, J. Hollenbach, Mil., ... 2
Cigars, H Fischerdick, Mil., ... 1
Hair work, J H Link, Mil., ... 2
Piano fortes, (Brown & Allen's,) T B Mason, Mil., Dip
Best piano, manufac'd in Wisconsin, C Solomon, Mil., ... 10
Ornamental sugar work, H George, Wauwatosa, ... 2
Long shawls, J Dawson, Madison, ... 5
Best flour crackers, J H Coles, Madison, ... Dip
Fancy card stand, H Chase, Mil., ... 1
India rubber goods, L W Russell, Mil, ... Dip
Stop cocks, C H Hoffman, Mil., ... 2
Elevations for farm buildings, T T Thomas, Mil., ... 3
Card basket, Mrs. Gardner, Oconomowoc, ... 50c
Pencil drawing, Miss A Johnson, Mil., ... 5
Machine for drawing water with 2 buckets, J S Jackson, Scott, N. Y., ... Dip
Specimens of dentistry, M P Hanson, Mil., ... Dip
Spring wheat flour, W H Pease, Fulton, ... Dip
Winter wheat flour, same, ... Dip
Friction matches, J P Schram, ... 1
Harness blacking, J Ashly, Delafield, ... 1
Rosewood secretary, W Wilkie, Mayville, ... Dip
Castile soap, Howell & Kine, Mil., ... 1
Willow chairs, C Fredericks, ... 3
Willow baskets, do 3
Marble mantles, H E Crampton, ... Dip
2 net curtains, Mrs. Gilman, Racine, ... 1
Extension top carriage, R E Ela & Co., ... Dip
Two seat rockaway, do, same, ... 3
Stationary top do, same, ... 5
Six seat carriage, same, ... 4
Horsepower equalizer, model, G Heley, Rochester, honorable mention. ..... Dip
Lot pine lumber and shingles, Mabbetts & Breed, ... 5
Improved spiral spring for wagons, C B Wakeman, Beloit, ... Dip
Chain pump, H. Boutwell, Racine, ... 1
Leather tanned in 12 days, E N Ely, Whitewater, ... 2
English trefoil grass, H Stacy, Palmyra, ... 1
Portable furnace, H W Goodrich & Co., ... Dip
Spiral do, same, ... Dip
Portable oven, meritorious.
Coffee urns, do.
Architectural drawings, Mygatt & Schmidtner, Mil., Dip
Patent portable fence, S G Tufts, Warren Co., Ohio, meritorious.
Kedsey's rainwater filter, J E Cheney & Co., Rochester, N Y., ... Dip
Top buggy, Mather & Thorn, Mil., ... Dip
Open do, same, ... 5
Solid tubing, S P Gilbert, Horicon, honorable mention.
Improvement in window blinds, same, ... 1
Thimble skeins, D Head, Kenosha, ... Dip
Feather flowers, Miss Pitman, Mil., ... 1
Home made rosewood book case, Noyes, Flertsheim & Co., Mil., ... Dip
View of Milwaukee, Gotzlinuber, ... 2
Richardson & Gay, Mil., exhibited:
Boynton's pat. Ventilating furnace, ... Dip
Metropolitan Cooking Range, ... Dip
Register and Ventilators, ... Dip
Schooley's patent Refrigerators, ... Dip
Store ventilators, ... Dip
Patent Felloe machine, L Adams, Amherst, Mass., Dip
Washing machine, K A Orvis, Waukesha, ... Dip
2d best leather work, Mrs I F Clark, ... 1
Hat and bonnet press, ... 1
Best case clothing, W W Sherman, Mil., ... Dip
Iron fence and gate, Bayley & Greenslade, Mil., Dip and 5
Worsted work, Mr Kusel, ... 1

Class D, No. 37.—Fruit.

Best variety apples, D Matthews, Burlington, ... $10
2d do, O S Rathbone, Broodfield, ... 7
3d do, More & Spears, do, ... 5
Best 10 varieties do, A S Putney, do, ... 5
2d do, M Spears, do, ... 3
3d do, A Van Vleck, do, ... 2
Best 5 varieties do, O S Rathbone, do, ... 3
2d do, M L Burdick, Lake, ... 2
Best show winter do, S Pettibone, Mil., ... 10
2d do, O S Rathbone, ... 7
3d do, M Spears, ... 5
Best show autumn do, M Spears, ... 10

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2d do, D Matthews,	7
3d do, O S Rathbone,	5
Best and greatest variety pears, J Bell, Wauwatosa	7
2d best do, S Pettibone,	5
Best and greatest variety grapes, G P Peffer,	5
do plums, do,	7
do show water melons, do,	8
do do preserved fruits, do,	5
do col. seedling apples, do,	1

Seedling grapes, favorable mention, C H Gifford.

WALWORTH COUNTY FAIR.

The seventh annual fair of the Walworth Co. Agricultural Society, was held on the society's grounds, near the village of Elkhorn, on the 10th and 11th days of Sept. The weather was not very favorable, but this did not seem to abate the ardor of the farmers of Walworth a great deal, for they turned out, with their wives, their sons and their daughters, and brought with them materials to make a good representation of the industrial pursuits of this county. The display of stock was the best we have seen at any county fair this year, while, in other respects the show was good. The Messrs. Brooks, of East Troy, brought from their extensive stock of full bloods a good show of what Wisconsin can do in the line of Short Horns. E. Depuy, and D. Burgett of the same place; A. M. Perry, of Troy; J. P. West, S. G. West, and H. H. Curtis, of La Fayette; H. Cross, O. G. Ewing and J. Fernly, La Grange; W. Bell, Joseph Rector, Walworth, and many others from different parts of the county, had fine blooded stock. David Williams, of Geneva, had a two year old, short horn bull, possessing as many fine points as we ever saw combined in one animal, which drew the first premium in this class. The first premium for the best Devon Bull, was taken by a fine animal owned by Orville Eldred. We should like to go on in this department and enumerate more, as we saw so many animals worthy of high praise, but space will not permit, and those who wish a perfect list must look to the local papers, in which it was published entire. Of horses there were about 130 entries.

The annual address was delivered by Hon. J. R. Doolittle, and was pronounced one of the best efforts of this talented and favorite orator.

The society is now in a flourishing condition. It has ten acres of land fenced and fitted up, and having good workers to back it up, must continue to prosper.

The following are the officers elect, for the year 1857:

President.—R. T. Seymour.

Vice Presidents.—Seymour Brooks, N. L. Gaston and J. R. Kinne.

Treasurer.—Edward Hodges.

Board of Managers.—S. B. Edwards, Hiram Cross, P. G. Harrington, O. G. Ewing, Christopher Wiswell, William Bell, David Williams, T. W. Hill and H. J. Starin.

RACINE COUNTY FAIR.

The Society for this county was re-organised this year, and their recent fair shows that the farmers appreciate industrial exhibitions when properly gotten up. A lease for fifty years has been given to the society, of a piece of ground at Union Grove, on which they held their Annual Fair, September 24th and 25th. The location is rather a bad one to draw a large crowd; as there is no large town, and no attraction aside from the fair, unless it be an extremely fine country—and every farmer in Racine county can see this without leaving home. Notwithstanding, there was quite a concourse of people both days. There is, at present, no hotel within two miles, and but for the open doors of the many farm houses around, some would have found pretty scanty accommodation. As for ourselves, we shared the bounteous hospitality offered at Rev. J. S. Emery's, while it was our good fortune to stop at Union Grove.

For the first real fair, this was very successful, but every man promised to do better next year. Premiums were offered for the best cultivated farms. This is an excellent plan—but we think the premium should be a little more than eight dollars, beside diploma, for the most systematic and well arranged farm. J. Russel, jr., received the premium for the best cultivated farm; J. C. Bennett, the second do.; and S. O. Bennett, the first, for the best reclaimed thirty acres of marsh. The premium on field crops were as follows:

Best	Piece of Indian Corn, John Scott,	Dip. &	8 00
2nd	" " John Near,		4 00
Best	" of Spring Wheat, J. C. Bennet,	Dip. &	5 00
2nd	" " " Joseph Nelson,		2 00
Best	" Oats, Joseph Hamlet.	Dip. &	2 00
Best	" Barley, George W. Hoyt,	Dip. &	2 00
Best	" Beans, John Semmar,	Dip. &	2 00
Best	" Potatoes, H. B. Trowbridge	Dip. &	4 00
2nd	" " John Scott,		2 00

Of cattle there was a good show. Horses were not so plenty. One, however, a draught stallion, owned by J. S. Jones

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seemed to be well built for strength and service. Of fancy horses there was a meagre display.

Of farm implements manufactured in the county, Racine probably had the best show of any county in the State, J. I. Case, received the first premium on threshing machines; Ela & Co., on fanning mills; H. Mitchell, best plow; Orson Phelps, best harrow; O. S. Northrup, horse rake; F. Terbush, best churn—an excellent pattern, that seemed to take the attention of the ladies; Ela & Co., best extension top carriage.

A horse power equalizer, invented by George Hely, of Rochester, in this county, we have seen at several fairs—at all of which, it has received the highest enconiums of the judges and threshing machine men. We think it an excellent machine, and as soon as we can get an engraving of it, shall give a full description of its working.

The address, by N. H. Dale, a farmer-boy, was terse and practical, and we shall take occasion to copy from it for the pages of the Farmer, hereafter.

The officers of this society deserve great praise, for the manner they have filled the positions entrusted to them.

ROCK COUNTY FAIR.

Rock has the oldest and best organized society in the state. They own ten acres of land in the southern part of the city of Janesville, have it *well* fenced, good halls erected, and fitted up with all the convenience that is necessary for the display of articles on exhibition, to the best advantage. There were several features in this fair, aside from the mere display of agricultural products, which helped to draw the large crowd they had, and some of these were important features of themselves. The trial of fire engines, in such a city as Janesville, gives the different companies a strong impetus to try to excell, not only when on display, but to keep them well organized for time of need. The ladies riding match was just right—there was no racing, and the whole thing was manag admirably. The premiums were given, not to those who rode the fastest, but the *best*. The Janesville Gazette, of October 4th, gives the premiums awarded. as follows:

"In the riding match, seven competitors appeared; Misses Miles, Cronk, St. John, Noggle, Van Gelder, and Heild. The riding was excellent throughout, and at times the liveliest interest was excited. To ladies over 17 years of age, the first premium of $20 was awarded to Miss Miles; the second, $15, to Miss Osborn. To Misses under 17, the first premium of $20 was given to Miss Cronk; the 2d, $15, to Miss St. John; the 3d, $10, to Miss Noggle; the 4th, $5, to Miss Van Gelder; and a discretionary premium of $3, to Miss Heild."

"Nothing occurred, at any time, to detract from the gratification and pleasure of this part of the meeting."

The display of cattle was good—horses also—and we wish that our space would allow us to enumerate, but as we cannot do the exhibitors justice, we will not commence. Eldred, Barrows & Co., from their extensive agricultural warehouse, made a large display, comprising almost every thing in the line of farming utensils that any western farmer is apt to need.

The fruit department was extensive; below is the report of judges in this division.

"C. Hanford, show of grapes, 1st prem,	2	00
J. P. Dickson, " 2d "	1	00
A. Kinney, largest and best varieties of apples, 1st prem.,	3	00
Z. P. Burdick, " 2d prem.,	2	00
Mrs. Williston, gooseberries, 1st prem.,	2	00

"Your committee would make honorable mention of the fruit exhibited, which was raised out of our county, and therefore could not come into competition with our own; among which was a large show of good specimens of fruit cultivated at the Rock River nursery, at Byron, Ogle County, Illinois, presented by P. B. Spaulding, of Beloit; also a good show of apples, presented by H. J. Starin, of Whitewater, and raised by him at that place. Mr. S. also presented good apples raised by M. C. Russel, of Walworth, and H. Beebe, and N. D. Pratt, of Racine. M. C. Russell had three varieties of good grapes. All of which is respectfully submitted. P. B. SPAULDING, Ch'n."

We are indebted to Mr. Spaulding for a fine lot of apples selected from those he had on exhibition, after the judges had made their examinations.

Altogether, the fair was decidedly a good one. All in all, it was the best county fair we have seen in Wisconsin, and we have attended quite a number this year; but we must respectfully submit our opinion—as the officers, in their report, challenged the state fair to beat them—that it was not *quite* up

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to the state fair, neither in the number of people present, or articles and animals exhibited. And, if it had been, we should have blamed Rock county, for in that case she would not have done her duty to the rest of the state, by making her mark in the general show. The wish of every Wisconsin man should be, to see industrial pursuits flourishing, not only in his own county, but, also, throughout the remainder of the State.

THE MANUFACTURE OF PAPER.

No manufacture has ever received more attention from mankind than that of paper. We find that it was commenced at a period almost immemorial, and consequently it cannot, with justice, be accredited to any particular nation.

In the Pharaonic periods, we meet with *papyri*—the name given to written scrolls—and this is no doubt the nearest we can approach its true origin. China, as well as Greece, Italy and Germany claim the discovery of manufacturing paper, from cotton and linen. This, however, is involved in obscurity, as most of the improvements were anterior to the year 1498. During the year 1558, a great advancement was made in this manufacture, in France and Holland, from which countries England and other nations received their supplies; and from this date to the present, an unceasing improvement has taken place, which is likely to continue.

The art of paper making has received the attention of every country, and among these our own stands pre-eminent. It is now well known, that at the present time, more paper is manufactured in the United States than any other country; and it has been stated that the product exceeds that of all other countries together. This is attested by the immense number of newspapers, and millions of books yearly printed, and stands as a noble monument to the intelligence and industry of the people. The demand has become so great that we have recently begun to experience the want of proper substances from which to manufacture. But when this want was first felt, the inventors of our country were soon experimenting, and ere long this demand will be satisfied. They are now making investigations among the numerous substances which nature affords, and already we see the beneficial results arising therefrom.

As paper is an article of extensive use, for literary, domestic and commercial purposes, its manufacture will ever prove profitable and extensive. The improvements will now be given, from the earliest records, which have been made in the production of this useful article.

In the year 1558, the people began to feel the want of this manufacture, which at once caused the scientific men of Europe to seek some substance from which an extensive production of paper could be had; but anterior to the year 1751, no attempt was attended with decided success. M. Guettard, of France, and J. Schaeffer, of Germany, in the year 1755, published the result of a long series of experiments, and displayed to the world new specimens of paper from the barks of trees, the tendrils of the vine, straw, wood, &c. Soon after this, a work on the nature of plants, was printed on paper manufactured from the marsh-mallow, and partly from the bark of what is termed the lime tree. The paper made from the former was of a medium quality, and of a yellowish color; that obtained from the Lime tree was coarse, and of a brown hue; but both were suitable for printing and writing. It appears that several years were spent, and yet the new manufacture had not arrived at a degree of perfection to warrant its extensive use. A rivalry at once sprung up between the French and Germans, and we find them striving to surpass each other in quality and production.

The following is a list of substances that were experimented with—also the results attending the inventions: From nettles, a dark green was obtained; from hops a dark brown; from mosses, a dusky green; from reeds, a light green; from the bark of the willow, a reddish brown; from the wood of the hazel nut tree, a pulp as white as the ordinary white paper now in use was obtained; from the poplar tree, it was of a darker shade, and suitable for wrapping paper; from the elm and osier trees it was of the same color as of the poplar; from the leaves of the burdock, and those of the thistle, a green and white spotted paper was the result. Thus it will be seen, that at this early period, a number of plants, and barks of trees, had been experimented with, and that these experiments were successful to a certain extent, in producing a great desideratum.

The following remarks, by Schaeffer, the German experimenter are deserving of attention; and show that when a substance had been obtained possessing the necessary fibre and color for the production of a suitable pulp, that the chemical processes were detrimental to both color and fibre—in some instances totally destroying both. It was, then, the chemical action which was the main hindrance to the successful termination of the experiments. These are the remarks referred to:—"The boiling of vegetable substances, or the wood itself, in alkiline solutions, with a view to soften them, and facilitate their conversion into pulp, is of no service; as, notwithstanding such

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treatment for several hours, they not only remained hard, but likewise assumed a yellow cast, though they had been formerly white. Even immersion in pure water effects the color of vegetables.

"Though lime water, if employed for macerating vegetables, that are to be made into paper without rags, facilitates the decomposition of the former, plants of tender fibre, which are naturally soft and pliant, require no lime water, especially when they are to be reduced in a fresh state—but with those of a hard nature, lime is indispensably necessary,"

Paper made from cotton, when treated in the manner similar to that exercised on linen rags, is clear and durable. It was invented in Greece, and a few years ago formed a very extensive branch of the Levant trade. The product of this plant cannot be valued too much for paper making. At this time when the demand is great, recourse may be had to the cotton fields of the South, where there is, and ever will be, an inexhaustible supply. This article of late has been more thoroughly tested by manufactures of the North, who state it to be equal to the best rags, and as the best substitute yet offered among the vegetable materials. The bark is the part of the plant intended to be used.

The pith of the thistle, was employed and experimented with by the indefatigable SCHAEFFER, with some success. He first stripped the stalk of its bark, and extracted the spongy pith; it was then put in the mill in its sappy state, and in a short time a clear and durable paper was afforded. The down on the cotton thistle has been used with success.

The Society for the encouragement of the Arts, in the year 1788, conferred a silver medal on a French manufacturer, for the production of forty-four quires of paper from the bark of the sallow-tree. About six hundred weight of the raw material was required to produce that quantity of paper. The paper produced from this was not equal to that produced from rags; but it was then remarked, that it "seemed likely to answer some valuable purposes, hereafter, when the mode of working raw vegetable material shall be better known."

At an early period, the inhabitants of Naughs, in Japan, manufactured paper from Hemp. It was macerated in lime water, beat, and then prepared for paper. In GUETTARD's Researches, it is mentioned that refuse material of the stalks can be made into strong packing or wrapping paper.

Dr. SCHAEFFER experimented with hop vines; but they required to be worked eight hours in the engine before they became fibrous or pulpy, sufficiently to be formed into paper. It was of a brown appearance, but on adding rags, became finer and white. He also used the stalks of blue cabbage, which, when reduced to a pulp, afforded good paper.

According to PLANCUS, most beautiful paper was prepared from the leafy husk of the maize, in a mill near Remini, in Italy. SCHAEFFER also made experiments with this, but they were not successful. He then turned his attention to the catkins of the white poplar, from which he obtained an excellent quality of paper. The pulp prepared from this substance was easily formed into sheets. The stalks of the flax seed were also experimented with, but were too expensive to warrant further progression.

Barley straw, proved the most profitable and gave the largest amount of paper material. SCHAEFFER devoted much time in perfecting the manufacture from this substance. He could not produce a white paper, however, without adding the twentieth part of linen rags.

Patents have been granted in the United States, for the manufacture of paper out of straw and hemp.

We have now recorded the distinct and marked improvements from the earliest periods to the year 1795, from which time a new era commences in the manufacture. The Government of England has granted more patents for inventions relating to paper and paper making, than any other nation. These will be duly recorded at the appropriate time. [The Inventor.

FEMALE BEAUTY.

Dean Swift proposed to tax female beauty and leave every lady to rate her own charms. He said the tax would be cheerfully paid and very productive.

Fontenelle thus daintily compliments the sex, when he compares women and clocks—the latter serve to point out the hours, the former to make us forget them.

The standards of beauty in woman vary with those of taste. Socrates called beauty a short-lived tyranny; Plato, a privelege of nature; Theophrastus, a silent cheat; Theocritus, a delightful prejudice; Carneades, a solitary kingdom; and Aristotle affirmed that it was better than all the letters of recommendation in the world.

With the Modern Greeks, and other nations on the shores of the Mediteranean, corpulency is the perfection of form of women; and these very attributes which disgust the Western European, form the attractions of an Oriental fair. It was from the common and admired shape of his countrywomen, that Rubens, in his pictures, delights so much in a vulgar and odious plumpness; when his master was desirous to represent the "beautiful," he had no idea of beauty

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under two hundred weight. His very graces are all fat. But it should be remembered that his models were Dutch women. The hair is a beautiful ornament of women, but it has always been a disputed point which color most becomes it. We account red hair an abomination; but in the time of Elizabeth it found admirers and was in fashion. Mary of Scotland, though she had exquisite hair of her own, wore red fronts. Cleopatra was red-haired; and the venetian ladies to this day counterfeit yellow hair.

After all that may be said or sung about it, beauty is an undeniable fact, and its endowment not to be disparaged. Sidney Smith gives some good advice on the subject. "Never teach false morality. How exquisitely absurd to teach a girl that beauty is of no value, dress of no use! Beauty is of value—her whole prospects and happiness in life may often depend upon a new gown, or a becoming bonnet; if she has five grains of common sense she will find this out. The great thing is to teach her their just value, and that there must be something better under the bonnet than a pretty face for real happiness. But never sacrifice truth." [Salad for the Social.

NOTICE TO PRE-EMPTORS ON "SWAMP AND OVERFLOWED LANDS."

SECRETARY'S OFFICE,
MADISON, October 16th, 1856.

All persons claiming the right to pre-emption to any of the above lands, are hereby notified that they will be permitted to pay for said pre-emptions at any time after this date, up to within ten days next, before the time set for the public sale of said lands, in the county in which the lands may lie. In order to guard the rights of contestants, no pre-emptor will be permitted to enter the tract by him claimed, until he shall file in the office of the Secretary of State, a certificate of the Register of the county, in which the lands claimed is situate, certifying that there are no adverse claims to said tract. And in case there are adverse claimants, the person making application to pay for the land by him claimed, shall procure a certificate as above, giving all the names of the adverse claimants, and by furnishing evidence at this office that he has notified such adverse claimants of his intention to prove his pre-emption, on a day fixed in said notice, giving one day for every thrity miles travel, from the residence of such claimant to Madison, his application will be heard and determined.

DAVID W. JONES,
Secretary of State.

Published October 15, 1856.

CHAPTER 195.

AN ACT to provide for the disposal and sale of the swamp and overflowed lands.

The People of the State of Wisconsin represented in Senate and Assembly, do enact as follows:

Section 1. All the lands granted to this State by an act of Congress entitled "An Act to enable the State of Arkansas and other States, to reclaim the swamp and other overflowed lands within their limits," approved September 28th, 1850, shall be sold by the Attorney General, Secretary of State and State Treasurer, whenever the Governor shall deem it expedient so to do. Such sale shall be conducted in the manner and under the restrictions provided for the sale of the School and University Lands, in chapter twenty-four of the Revised Statutes, so far as said provisions may be applicable, and not inconsistent with the provisions of this act.

Sec. 2. In all cases of pre-emption under the act of the Legislature entitled "An Act for the protection of the swamp and overflowed lands of the State, and to grant pre-emption rights thereon," approved April 2d, 1856, the pre-emptions on complying with the provisions of this and the last aforesaid act, shall have the right to purchase in virtue of such pre-emption, one hundred and sixty acres of said swamp or overflowed lands, at one dollar and twenty-five cents per acre, all and every of the pre-emption rights granted by the aforesaid act, approved April 2, 1855, are hereby secured to every person who before the taking effect of this act, shall have complied with the provisions of the said act, approved April 2d, 1855, and every such pre emptor shall by the affidavits of at least two credible and disinterested persons prove that he has complied with the provisions of the aforesaid act, approved April 2d, 1855, such affidavit shall be taken before some person by law authorised to administer oaths and when completed shall be filed with the Register o, Deeds, of the county wherein such pre-emption lands lie, or of the county to which it may be for county purposes attached. Such Register shall on demand of, or in behalf of every such pre-emptor, make out a true and complete copy of such affidavits, as aforesaid, and of the declaratory statement of such pre-emptor, as aforesaid, and which is required by the aforesaid act, approved April 2d, 1855, and over his official signature, shall certify to the correctness and completeness thereof, in the same manner as by law required to make copies of the record of deeds evidence.

Copies of such declaratory statement and affidavits certified as aforesaid shall be by, on or behalf of such pre-emption filed with the Secretary of State, and the whole purchase money paid at least ten days prior to the time appointed for the sale of the swamp and overflowed lands in the county where such pre-empted lands lie. A neglect to comply with the provisions of this act, shall be deemed and is hereby declared to be a waiver, surrender and forfeiture of all rights to said lands in virtue of pre-emption rights.

Sec. 3. After the taking effect of this act no pre-emption shall be made to any of said swamp or overflowed lands.

Sec. 4. Either the Attorney General, Secretary of State or State Treasurer, or any pre-emption claimant or the contestant of such claimant may proceed by way of appeal to the circuit court of the county, wherein is situated any of said swamp or overflowed lands claimed by pre-emption right, and in such court have the pre-emption claim determined by a jury. In all such appeal proceedings the appellant shall within sixty days after the copies of the statement and affidavits mentioned in section two of this act, and as in the last mentioned section, filed with the Secretary of State, procure a certified copy thereof from the Secretary of State, and file the same in the circuit court to which the appeal is taken.

And the circuit courts shall make rules prescribing the mode of procedure on such appeals. If on appeal, the right claimed by pre-emption shall be determined against the pre-emption claimant, then, in that and every such case, the State Treasurer shall refund to such claimant, his heirs, executors or administrators, the purchase money paid by him for the lands by him claimed.

Sec. 5. It shall be the duty of the Attorney General Secretary of State and State Treasurer, to adopt without appraisal or survey, the lines, boundaries and descriptions of the United States survey, as exhibited by the plats and field notes of the swamp and overflowed lands, and which plats and field notes they are hereby required to procure and pay for, as far as may be necessary, out of the proceeds of the sales of such lands.

Sec. 6. The minimum price of said swamp and overflowed lands shall be five dollars per acre, except such as shall be purchased in virtue of pre-emption rights. At least one half of the purchase money of all said lands described or designated in the plats and field notes aforesaid as timbered lands shall be paid at the time of the sale thereof, and of all other in the ratio as provided in chapter twenty-four of the revised statutes, for the sale of

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School and University lands o her than the five hundred thousand acres.

Sec. 7. The legitimate expenses incident to the sale of the swamp and overflowed lands aforesaid shall be first paid out of the proceeds of such sales, and seventy-five per cent. of the residue, and all of the purchase money for the selected lands in this section hereafter mentioned, shall form and be constituted part of the school fund of this State, and shall be subject to the same uses, designs, regulations and laws. All laws by or under the authority of this State, selected in lieu of swamp or overflowed lands sold or otherwise disposed of by the United States since the passage of the aforesaid granting act of Congress is hereby for the purposes contemplated, herein declared to be swamp and overflowed lands.

Sec. 8. Twenty-five per cent. of the residue of purchase money mentioned in the next preceding section shall be paid in the county treasury of the county in which the sales may have been made, and the county Treasurer upon the receipt of such money shall give his receipt therefor to the Attorney General, Secretary of State and State Treasurer, and a distinct and accurate list of all the lands sold in each township in said county, shall be made in duplicate by the officers making such sales as aforesaid, one of which shall be filed in the office of the Clerk of the County Board of Supervisors of such county, and the other shall be filed in the office of the Secretary of State, and in case there is an organized town in such county containing any of such lands sold as last aforesaid, which require and are susceptible of being drained, then in that and every such case, such county treasurer shall pay to the treasurer of such town its proportionate share thereof, the same being the twenty-five per cent. residue of money realized from the sale of lands therein. And such town shall proceed to the reclamation of such lands by draining the same with all convinient speed. All such money not paid to the town treasurer as last aforesaid, within two years after the receipt thereof by the county treasurer, shall be by such county treasurer paid into the State treasury, and the same shall form a constituant part of the school fund, and shall be managed as provided by law in relation to the said fund.

Sec. 9. All laws for the protection of School or University lands, are hereby extended and made applicable to the swamp and overflowed lands in this act mentioned or contemplated.

Sec. 10. All laws inconsistent with or repugnant to the provisions of this act are hereby repealed.

Sec. 11. The swamp and overflowed lands of this State shall be sold in limited quantities for actual settlement or for the use of an adjoining farm to each purchaser not more than three hundred and twenty acres each.

Sec. 12. This act immediately after its passage shall be printed by the State Printer, and when so published shall take effect and be in full force.

WILLIAM HULL,
Speaker of the Assembly.
ARTHUR McARTHUR,
Lt. Gov. and President of the Senate.
Approved October 11, 1856.
COLES BASHFORD, Governor.

INVENTOR AS WELL AS ARTIST—The Florence correspondent of the Newark *Daily Advertiser*, under date of Sept. 5th, says:—"Our countryman, Powers, whom Mechanics have never forgiven for his success in Art, is about to appease her with a new tool, which promises to supersede altogether the present *file*, by doing all its work easier, better, and cheaper. This instrument, originally invented to faciliate his operations in sculpture, has now been adapted to all the uses of the file in metal, ivory, bone, wood, leather, &c. and will, moreover take the place of the grater in the kitchen. The inventor has devised a compact machine for producing it in great numbers with the least possible expense, and when the castings now in progress are completed, it will be brought into use—doubtless to the great profit of all parties."

EDITOR'S TABLE.

October, during its earlier half, was mainly devoted to Fairs, and occupied most of our time in attending and aiding them, in which occupation we have found much pleasure and intellectual profit, and no small amount of hard work and annoyance.

Getting up a fair, in all its details, labor and pains, is like getting up a large party, "only more so." There is a world of different things to be arranged, and all on the spur of the moment. Every bodies tastes and fancies are to be consulted and provided for, and when at length everything is supposed to be ready, and the company begin to assemble with their animals and articles, how many things are found to be wrong, or lacking altogether. How many among the selfish, unthinking multitude deem themselves the object of especial neglect, or intended slight. How many are wronged by partial judges, or humbugged generally by the officers and managers. How many escape great impositions by their superior smartness, (taking their word for it.) How many see immense defects in the whole thing, and are ready to instruct the getters up in the right way to do it next time. In a word, you meet with plenty of people on such occasions that know all about it, and are so wise, that Solomon would make no pretensions in their presence; but unfortunately when the time comes that there is really anything to do, then these wise people are most invariably scarce and nowhere to be found.

Very few we ween, among those who attend fairs, and rather grudgingly pay their admission, have much of a realizing sense of the amount of hard work and vexation that has to be borne by those who get them up. That there is much that goes wrong on such occasions, all sensible people know and expect, and that great improvement can be made, in the getting up and management of both our State and County Fairs, we have no doubt; in fact we expect and hope it, and shall at all times labor for it to the extent of our ability.

In furtherance of such improvement, we would suggest the holding of a convention on the part of the principal officers of different societies, in conjunction with such prominent friends of agriculture as are inclined to second the movement, some time during the coming winter, for the purpose of arranging such features of policy and management, as will conduce to the good of such enterprises, and especially to arrange so that our fairs will not all come on the same day, thereby utterly precluding the attendance of more than one of them, on the part of those

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who would like to see as many such displays in the different localities as possible. Something might also be done, in the way of devising some mode of appointing judges for the principle departments, who would exchange with neighboring counties, thereby promoting good fellowship and general interest, and at the same time remove all reasonable grounds of partiality and suspicion. It strikes us that these and many other kindred things might be effected, that would do much in the way of putting our various societies upon a firm, harmonious and agreeable footing. What say the friends of agriculture on the subject? We hope we may hear from such as take an interest in the matter, that we may have an early understanding on the subject, and do whatever we do in season.

The material for Fairs, in our own State, during the present season has been about as poor as will generally be the case. In the first place, we have no fruit, except a few apples, to show, and vegetables as a general thing, are equally poor. Then the animals are ordinarily in poor condition, on account of the dry season and short feed, and the people themselves don't feel very rich, when taking half for wheat that they have got for the last two years. All these circumstances have rendered it rather an unpropitious season for such public shows. Still, notwithstanding all these discouragements, they have usually come fully up to the peoples' expectations, and given good proof of what can be done hereafter under favorable circumstances and good management.

One of the greatest pleasures to us in attending fairs, arises from the satisfaction of meeting so choice and sterling a class of the people, equally removed from the two extremes of snobby codfish aristocracy and loaferly insolence. The first are too nice to mix much in such every-day utilitarian matters, and the latter take little interest among well regulated people, where whiskey shops and beer saloons are so scarce. Hence the very cream of all really good society such as rests on a real foundation, instead of conceit and vanity, is there as fully represented as we ever find it in any other place. Perhaps we would have to make a little abatement on this at fairs where horse-racing was a very prominent feature. But let us hope that such will not often be the case. Instead of the jockey and the blackleg, let us court the company of the sterling farmer, mechanic, merchant and business man, with their wives and children. Yes, the children.—Who enjoy fairs more highly than they, or derive more benefit from them? But we must drop this subject of fairs, however congenial it may be to our feelings, to be resumed again from time to time, as opportunity offers.

Swamp Land.—

We, this month, publish the law regulating the sale and pre-emption of swamp lands, for the benefit of those it may concern.

Professional Call.—

We recently had the pleasure of a call from Prof. Nash, of the Plow, Loom and Anvil, and were happy to greet so sterling and philosophic a writer, here in the *new* west. He seemed equally well pleased with our fine country and its show at the State Fair. He expressed some surprise at not seeing anybody drunk; all very natural to be sure, for an eastern man, who cannot well get rid of the idea that a new country necessarily contains a half wild population.

Those who want a sterling eastern agricultural paper, cannot fail to be pleased with the Plow, Loom and Anvil, published in N. Y. at $3,00 per annum, with a liberal discount to clubs. It abounds in excellent original articles of the most sterling character.

Dred.—

We are indebted through D. S. Durrie, Esq., to the publishers, Phillips & Sampson, for a copy of Dred.

As was anticipated, it proves a very readable and captivating story, with a moral hardly behind Uncle Tom's Cabin, which in our estimation, is as high praise as could well be bestowed upon any work of the kind. Mrs. Stowe is one of the best writers of the age—whose name and works will live as long as the human heart has warm sympathies for the oppressed, and that we trust, will be longer than negro slavery will endure, heathenish and discouraging as the present aspect is on the subject. Mrs. S. is first and last, in her peculiar kind of literature, and will not soon be eclipsed. Everybody has of course read Uncle Tom, and everybody should, and will read "Dred."

Mr. Durrie will be happy to supply all within his compass of trade, not only with "Dred," but with many things in the book line, not so *dred-ful*.

To Contributors.—

We are under the necessity of leaving out several articles that we have received for publication, for want of room. The fair season will soon be over, and relieve us somewhat at that order of literature.

Carter Potatoes.—

We received a peck of these fine potatoes of Mr. Abernethy, who stated that he had raised two hundred bushels the present season, and would probably advertise most of them for sale, for seed. They are one of the most popular Eastern varieties, and might be substituted to the advantage of many a farmer who now raises mongrels of ten different kinds upon each half acre.

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Cayuga Chief—

We have received the first two numbers of this popular family journal, just transplanted from western New York to our thriving soil, and established at Ft. Atkinson. Mr. Thurlow W. Brown, its principal editor, has won an enviable reputation as a writer, and will undoubtedly fully sustain it in his new location. We predict for the 'Chief' a wide circulation among the readers of the west, and believe it will prove one of the best family papers in circulation among us.

Erratum.—

We owe our friend P. W. Boss, of North Prairie Station, an apology for a mistake that crept into the last No., where he was called Robb instead of his true name.—Through some carelessness we got the names confounded, and did not notice it in season for correction. Friend B must excuse us, as it is so human to err. He will of course excuse us for saying that he has some of the best French sheep in the State.

R. F. Powers

Advertises a new and beautiful stock of millinery and ladies goods, just received for the fall and winter trade. We have never seen any thing to excel his show of fine articles; and the only wonder is, how our ladies can afford to buy such nice and costly things. But we suppose that there is no more limit to this, than to the circumference of fashionable skirts. All must give him a call and judge for themselves. See his card, on page 528.

See new advertisement of D. J. Powers. Also, of C. M. Saxton & Co., on Morgan horses; Fowler & Wells, to young men; J. S. Fillmore, farm for sale; Johnson & Fuller, premium colored photographs.

Sand Lake Potatoes.—

J. P. Heistand had on exhibition, a basket of these excellent potatoes at the Dane Co. Fair. We had the pleasure of trying a few, and pronounce them the most delicate, and richly flavored potato we ever tasted. In appearance they somewhat resemble the Carter.

The new cent piece recently furnished at the United States Mint, Philadelphia, is the size of the one half cent, and is composed of fifty-seven parts of copper, seven of nicel, and one of zinc. It has a light appearance, with a faint red tint, and is in beautiful contrast with the American silver and gold pieces, and will not, as the old cent did, tarnish by contact. The weight of the new is only seventy-two grains—that of the present copper cent is one hundred and sixty-eight.

In 1851, the United States imported from China, 34,327,000 lbs. of tea

The number of emigrants landed in New York, up to September 24th, of the present year, was 92,242—and for the same period last year, 104,648.

The aggregate tonnage of the United States in 1855 was 5,180,083 tons.

The span of bays which darw Louis Napoleon's carriage through the streets of Paris, were raised by a gentleman in Lewis county, N. Y., and cost $3,000 each. So say the papers.

A Member of the Scottish Mesmeric Curative Association stated at a late meeting, that persons desirous of avoiding sleepless nights, should lie with their heads to the north—on on account with their heads to the west.

The Tea Plant has been successfully cultivated at Santa Cruz, in California, from seeds found last spring in a caddy purchased for consumption.

TO YOUNG MEN,

PLEASANT AND PROFITABLE EMPLOYMENT.

YOUNG MEN in every neighborhood may obtain healthful, pleasant and profitable employment by engaging in the sale of useful and popular Books, and canvassing for our valuable Journals. For terms and particulars address, prepaid,

FOWLER & WELLS,
308 Broadway.

P. S. All Agents who engage with us will be *secured from the possibility of loss*, while the profits derived will be very liberal.

FRENCH MERINO AND SOUTH DOWN RAMS AND RAM LAMBS FOR SALE.

FRENCH Merino and South Down yearling rams that have never served any ewes, and also ram lambs, both from imported stock, (that may be seen at the Summit farm,) for sale.

Also, a few crosses of the French buck No. 77 upon the Spanish Merino and of the South Down buck "Bunker Hill" upon common ewes, for sale.

Address, SARGENT COOK,
Care of Hon John Wentworth, Chicago, Ill.

DURHAM BULL FOR SALE.

THE subscriber offers for sale, his thorough bred Durham Bull "Favorite," now 18 months old. He is one of the finest animals in the State, with a perfect pedigree, from the herd book Any individual, or neighborhood, wishing to improve their stock, can make an excellent bargain for him. We offer him for sale on account of having embarked our entire herd of 40 cows in the milk business, leaving no opportunity to raise calves. He will be sold low, and on any credit desired, on approved security. Any further information can be given by mail or otherwise.

SHEEP.

I have still from 100 to 150 first rate Spanish and French grade sheep for sale, all ewes, and as good as could be wished from which to start a flock. I will sell them in lots to suit purchasers, on one and two years credit, for good notes. Those wishing to buy will do well to apply soon. D. J. POWERS.

Madison, Nov. 1, 1856.

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MORGAN HORSES.

A Premium Essay on the Origin,

History, and Characteristics of this remarkable

AMERICAN BREED OF HORSES.

Tracing the Pedigree from the original Justin Morgan, through the most noted progeny, down to the present time.

WITH NUMEROUS PORTRAITS.

To which are added

HINTS FOR BREEDING, BREAKING,

AND GENERAL USE AND MANAGEMENT OF HORSES,

with practical directions for training them for Exhibition at Agricultural Fairs.

BY D. C. LINSLEY, MIDDLEBURY, VT.

Price One Dollar. Sent Free of Postage.

Oct23-1t. C. M. SAXTON & CO.,
Agricultural book publishers, 140 Fulton st., N. Y.

GREAT BARGAIN!

FARM FOR SALE!!

THE FINE FARM consisting of the east ½ of east ½ of section 23, west ½ of northeast ¼ section 24, and south-east ¼ of north-west ¼ section 24, town 7, north of range 18 east, said to contain 200 acres, and generally known as the Kellogg Farm, is now for sale, and the attention of all persons in want of a great bargain, a paying investment, and desirous of becoming possessers of a remunerating tract of land, is called to this notice.

The subscriber has directions to sell the above mentioned splendid property, at a great sacrifice. It is situated in the fertile county of Waukesha, within an easy distance of the Milwaukee & Mississippi R. R. Depot, at Waukesha, and is one of the fastest improving portions of the State, and will be sold for 3,000. For particulars, &c., apply to J. S. FILLMORE,
No. 2, Juneau Block.

COLORED

PHOTOGRAPHS!!

BE IT remembered, that Johnson & Fuller have been awarded by the Wisconsin State Agricultural Society, the

HIGHEST PREMIUM

for the best pictures produced in the State; and we have only to say to those who wish Colored Photographs, or any other style of portrait, to "Just walk right up to the Captain's office," and be taken.

Those having old Daguerreotypes of deceased friends, which in time may entirely disappear or fade out, by sending them to Johnson & Fuller, with a description of the color of the hair, eyes and general complexion, may have them copied large size, and colored in a style to almost equal life itself.

Also, ivory miniatures, beautifully painted from old pictures. C. A. JOHNSON.
J. S. FULLER.

MEACOR OR LAWTON

BLACKBERRY.

THE Undersigned would inform the public, that he will have a choice lot of the above Celebrated Blackberry Roots for sale, about the first of October next, coming so direct from their original source, as to leave no doubt of their genuineness. They are undoubtedly the best Blackberry in the world, combining all the desirable qualities of large size, fine flavor, prolific bearing, great hardiness, and Easy Cultivation. We shall be able to furnish them individually, or by the dozen.

Price—60 cents each, or $6 per dozen.

We will forward them, securely packed by mail, to those sending orders enclosing the money.

JAMES L. TOWNSEND.
CAMBRIDGE, Dane Co., Wis., Sept. 1, 1856. tf.

H. B. MERRILL & Co.,

(SUCCESSORS TO COBB & MERRILL.)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's ware, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c.

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishmedt the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

Jy'56tf. No 3, FAIRCHILD'S BLOCK, MADISON, WIS.

LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

A HOME

FOR INVALIDS AND THEIR FRIENDS,

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor E. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

Terms for board and treatment, $9 to $12 per week. Excellent stabling and carriage room is provided for those who wish to keep their own conveyance. Circulars sent on application.

Address E. A. KITTREDGE, M. D.
Lake Side Water-Cure, Madison Wis.

July 1, 1856, tf.

Powers' Daguerrean Gallery,

Lappin's New Block, Janesville, Wis.

DAGUERREOTYPES taken in the best style of the Art. Ambrotypes taken if preferred. Instruction given in the art and stock for sale.

March, 1856. 1y J. R. POWERS.

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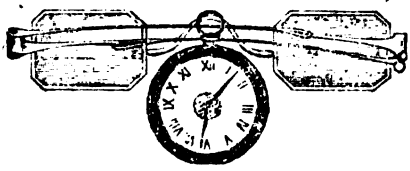
COOK & BELDEN,



Capital House Block, Madison, Wis.,
Have constantly on hand a complete Assortment of

Watches, Jewelry,

PURE SILVER AND PLATED WARE,
FANCY GOODS, CLOCKS, &C.

All Goods warranted as represented or money refunded. Silver Work bought at our store is engraved free of charge. Watches and Jewelry Repaired and Warranted, by *Experienced Workmen.* tf.

MADISON, August, 1856.

1856.] MILWAUKEE [1856.

STOVE STORE,

ISAAC BONNEL—AGENT,

Wholesale and Retail Dealer in Stoves, Tin and Japanned Ware, and Agent for

Herring's Champion Safes,

FAIRBANK'S PATENT SCALES,

WAREHOUSE TRUCKS,

Cistern and Well Pumps, Corn Shellers, Clothes Horse Castings, Flat Iron Heaters, Charcoal Furnaces, Robinson's Patent Double-Acting Downward Draft Gridiron, &c., &c. Also Manufacturers of

Tin, Sheet Iron, Copper & Zinc Ware.

JOB WORK.

Of every description done at short notice, and on the most reasonable terms.

MORRIS STREET, NEAR CAPITAL HOUSE, MADISON, WIS.

N. B.—Goods sold at Milwaukee prices, adding transportation. Terms Cash.

MADISON, Wis., Aug. 1, 1856. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,
MILWAUKEE, WIS.
WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,
AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as *any house West of New York.*

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.
MILWAUKEE, May 1, 1856. tf.

MENDOTA NURSERY.

A MILE AND A HALF WEST OF THE *STATE UNIVERSITY.*

TREES, SHRUBS, VINES &C., &C.

H. F. BOND.

MADISON, Wis., Aug., 1856. tf.

FURNITURE!

1856! 1856!

G. C. BUCK & CO.,

MANUFACTURERS AND DEALERS IN

Cabinet and Upholstery.

Rooms on Washington Avenue, East of the American Hotel, and on Morris Street, near the Court House, Madison, Wis.

KEEP constantly on hand everything wanted in the Furnishing line. Buying all our Goods in the Eastern market, we can of course sell cheaper than establishments purchasing of Western Jobbers.

Beds and Bedding,

Of all kinds and qualities. Mattrasses, Hair, Excelsior, Husk and Sea Grass. Take your choice and we can suit all tastes.

SOFAS, CHAIRS, CENTRE-TABLES, BEDSTEADS LOUNGES, WARDROBES, BUREAUX, SIDE-BOARDS, LOOKING GLASSES, &C., &C.

Together with innumerable articles too small and numerous to mention, and too useful to be overlooked. We are now prepared to supply orders at wholesale as well as retail as heretofore. Country merchants will take notice.

Look out for the Big sign on Washington Avenue, East of the American Hotel

O. C. BUCK,
WM. HAWLEY,
O. C. CHURCH.

MADISON, August 1, 1856. tf.

Boston Boot and Shoe STORE.

Magnificent Stock and New Arrangements.

HAVING purchased the magnificent stock of Boots and Shoes of Willis, Neil & Co., I am now prepared to offer to the people of Madison and vicinity, an extensive assortment of custom made work, from the Best Manufacturer in the East, and at Eastern Prices. My motto is, "Low Prices, Small Profits, and Quick Sales." For the Ladies, Misses and Children, my assortment of Boots, Gaiters, Buskins and Slippers, of every variety and style, both quality and price, is not equalled in the West. For the Gentlemen, Boys and Youths, I have almost everything worn or called for; every style and variety of *Boots, Congress Gaiters,—Oxford, French and Jersey Ties*—and a great variety of Boots and Shoes which, for style, quality and price, cannot fail to please everybody.

At Curtis' old Stand, Near the Capital House.

D. M. BURWELL.

MADISON, Wis., Aug. 1, 1856. tf.

Madison Plow Factory,

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel Plows, and we feel confident that their equal cannot be found East or West, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

We would also call your attention to our Breaking Plows, which we sell cheaper than any plows of the kind offered in this market.

☞ TIBBITS & GORDON are the only agents in Madison.

C. H. BILLINGS. S. H. CARMAN.
MADISON,

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FOR SALE,

CAHOON'S SEEDLING PIE PLANT.

Gooseberries,

CURRANTS, GRAPE VINES, BULBS,

SHRUBBERY, TUBERS, &C., &C.

B. P. CAHOON'S Seedling Pie Plant. Length of Stock 26 inches, and circumference 43 inches.—Weight, 8½ pounds. Circumference of the Leaf 29 feet. Product of one root at one cutting, forty-eight pounds. I will securely pack in boxes, and forward according to directions. Ten Roots for $5; Five Roots for $3; One Root for $1; by the Hundred, for $40.

Cash, in all cases, to be sent with the order.

TESTIMONIALS:

From the American Institute Proceedings, Aug. 5, A. D. 1856:—

MAMMOTH PIE-PLANT.—Selon Robinson exhibited a stalk of Cahoon's Mammoth Seedling Rhubarb, grown at Kenosha, Wisconsin, that excited considerable curiosity. It was out of a box sent to the Tribune Office for distribution, and some of it on trial was found as rich and tender as that of smaller growth. It is supposed to be the most productive variety grown for culinary purposes, and should be in every market garden, and then, possibly, it would be grown in such abundance that it could be purchased by people in ordinary circumstances.—*N. Y. Tribune.*

Association for the Exhibition of the Industry of all Nations, NEW YORK, July 4, 1854.

B. P. CAHOON, Esq.—Dear Sir—This is to certify that specimens of your Seedling Pie Plant are on exhibition at the Crystal Palace, and deserving of special approbation for mammoth size and excellence of quality. They are superior to any production of the kind on exhibition.

Yours, Truly,
P. T. BARNUM, President.

MAMMOTH PIE PLANT.—B. P. Cahoon, Kenosha, Wis., has just sent us three Pie Plant leaf stalks that outgo anything we have ever seen of the kind before; as after performing the long journey from their place of growth—in what manner we are not informed—the three stalks weigh eleven and a quarter pounds.—*N. Y. Tribune.*

To the Cincinnati Horticultural Society:—

Being on a tour through Wisconsin, I called upon Mr. B. P. Cahoon, of Kenosha, who has a remarkable variety of Seedling Rhubarb. I examined his plantation of about 9,000 plants, and its wonderful properties have not been overrated. The Victoria I saw growing alongside of his Seedling, subject to the same treatment—soil identical—would not weigh one-fourth as much as the Cahoon Seedling. I can, through your Society recommend the plant to the notice of amateurs and cultivators as the best plant known. His stalks for market would measure from three to four inches wide, two or three inches thick, and two feet long, and so tender that many leaves I saw broke down with their own weight. It is a chance, seedling, originated by Mr. Cahoon, from the seed given him at Chicago, and was the only plant from the seed that was worth cultivation.

Respectfully, Yours, JULIUS BRACE.
Cincinnati, August 24, 1855.

We counted on one root Fifty-five stalks, of which the longest was two feet in length from root to leaf, and would girt eight inches or more. The others were of all sizes down to fifteen inches in length, and an inch in diameter, though the average would be twenty inches long and four or more in circumference. This root was not an unusual one, and was only an average of those which have stood three years and are allowed a fair chance. Mr. C. showed us a stalk preserved in spirits, which is five and a half inches wide by twenty-seven long.—*Prairie Farmer*, for September, 1855.

B. P. CAHOON.

KENOSHA, Wis., Oct. 1, 1856. 2m

MADISON NURSERY,

NORTH END OF WASHINGTON AVENUE,

BY JOHN HAND,

WHO offers to his Patrons and the Public, at reasonable prices, the following varieties of Fruit Trees, and Ornamental Shrubbery, &c., consisting in part of Apples, Pears, Plums, Cherries, Grape Vine, Large English and Houghton's Seedling Gooseberries; Black, Red and White Grape Currants: Fastolf and White Antwerp Raspberries; Siberian Crab, Radford's Giant, Myatt's Victoria and Mammoth Rhubarb, or Pie Plant; Giant Asparagus; eight varieties of choice Strawberries; Dwarf and Climing Roses in great variety; all kinds of Ornamental Shrubbery suited to the climate, among which will be found large well furnished plants; also a good variety of Herbaceous Plants—Bulbous Roots, &c.

The above are all grown in Madison. They all stood the severity of last winter without injury.

All orders promptly attended to, and delivered free of cartage within the limits of the city.

MADISON, Oct. 1, 1856. 2m.

WHOLESALE PRICE LIST OF THE

RIVER BANK NURSERIES,

ROCHESTER, N. Y.

200,000	Apples, one year old,		$20.00	per 1,000.
100,000	" two "		35.00	"
100,000	" three "		62.00	"
80,000	" four "		85.00	"
20,000	Cherries, 1 yr. old,	$12.00 per 100;	100.00	"
10,000	" two "	16.00 "	140.00	"
20,000	Dwarf Pears, 1 yr.	18.00 "	160.00	"
10,000	" two yrs.,	25.00 "	250.00	"
15,000	Stand. Pears. 1 yr.	16.00 "	160.00	"
8,000	" two yrs.,	25.00 "	250.00	"
20,000	Peaches, 1 year,	10.00 "	80.00	"
5,000	Apricots "	12.00 "	100.00	"
10,000	Plums, "	20.00 "	180.00	"
5,000	Grapes, 2 years,	10.00 "	100.00	"
3,000	" 1 year,	8.00 "	75.00	"
2,000	Quinces 1 yr.,	15.00 "	150.00	"
8,000	Currants, 1 yr.,	7.00 "	60.00	"
4,000	" 2 yrs.,	9.00 "	90.00	"
3,000	Gooseberries, 2 yr.	10.00 "	90.00	"
5,000	Raspberries, 1 yr.,	5.00 "	40.00	"

STOCKS.

200,000	Apple Seedlings, 2 yrs. old,	$4.50	per 1,000.
100,000	" " 1 yr,	2.500	"
80,000	Pear, 1 yr.,	15.00	"
50,000	Plum Seedlings, 1 yr. old,	14.00	"
60,000	Cherry, " "	5.00	"
30,000	Osage Orange, " "	5.00	"

I would say to those about starting in the business, that I will offer great inducements when large quantities of the above are taken, both as to time and price, on their sending me a list of articles needed.

P. S.—I will also receive and fill orders for Apple Grafts, packed and delivered at the Railroad Depot, free from charge, for $7 per thousand, in quantities of from one to two hundred thousand of the best varieties.

☞ Workmanship done in the best manner by experienced hands. GEO. CHERRY, Proprietor.

Office, 106 State Street, Rochester, N. Y.

OCT. 1, 1856. 2m.

CARPENTER, NOYES & CO.,

REAL ESTATE AND LOAN AGENTS,

AND

Money Brokers,

MADISON, - - - - - - - - WISCONSIN.

Will buy and sell Real Estate, invest Money and negotiate Loans for non-residents and others, pay Taxes, collect Rents, locate Land Warrants, buy and sell the same on commission, examine and perfect Titles, insure Life and Property in responsible Companies, &c., &c.

S. D. CARPENTER,
REUEL NOYES,
ROLLA A. LAW.

MADISON, Oct. 1, 1856. tf.

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Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date,..... $1,374,284 00
Total amount of Premium Notes received,.. 21,500 00
do do Cash Premiums received..... 11,454 00
do number of Policies issued,..... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and Expenses paid to date, 9,871 48

Balance in favor of the Co., Jan, 1, 1856,.... $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to farmers and others wishing Insurance, a safe and reliable Company in which to Insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:

B. F. HOPKINS, *Sec'y* N. W. DEAN, *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS, *V. Pres.*

Directors:

L. J. FARWELL, N. W. DEAN. SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J, POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

C. C. OLIN, General Agent.

MADISON, Jan., 1856, tf.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS AND STATIONERY,
BLANK BOOKS, WALL PAPER,
AND FANCY GOODS,
BRUEN'S BLOCK, MADISON, WISCONSIN.
BOOK BINDERY
CONNECTED WITH THIS ESTABLISHMENT.

Book Binding
DONE AT THIS OFFICE.
MAGAZINES, MUSIC AND
Miscellaneous Books Bound on Reasonable Terms.
Blank Books Manufactured.
POWERS & SKINNER.

MADISON, Wis, Aug., 1856.

E. B. CRAWFORD,
FASHIONABLE MERCHANT TAILOR,
KING ST., NEAR THE MADISON HOUSE,
Madison, Wisconsin.

Suffolk Pigs,
OF PURE BLOOD ---- FOR SALE BY
A. G. HANFORD.

WAUKESHA, Wis., Sept. 1, 1856. tf.

A. B. VANCOTT'S
JEWELRY STORE!!
NORTH-EAST CORNER OF
East Water and Wisconsin Streets, Milwaukee.

THIS old and well tried establishment is as new as ever, in its full tide of prosperity. The stock of Goods is new and choice, and the prices so favorable as to make the place a favorite and desirable resort for persons of all ages, sexes and conditions.

The Stock is the largest and most desirable ever brought to the western market. New Goods of our own importation and manufacture, which will be sold to the trade at the lowest New York Jobbing prices.

Jewelers, Merchants and Peddlers, will do well to call before going East or purchasing elsewhere. Among this Stock may be found a full assortment of WATCHES, from the most celebrated manufacturers, together with JEWELRY of every kind of the most fashionable patterns. Also—MASONIC JEWELS and REGALIAS of our own manufacture. Watch Glasses and Materials; also, Watch Maker's Tools, of every variety.

The proprietor is thankful for past favors, and requests a continuance of them

MILWAUKEE, Sept. 1, 1856. tf.

Notice To Stock Breeders.

FOR SALE—The very Superior Imported Durham Bull, "ROTHERSTHORPE," 3 years old, (928 A. H. B., vol. 2 p. 225,) bred by Geo. Falkner, Esq., Rothersthorpe, Northamptonshire, England. Also a pure bred DURHAM BULL CALF, sired by Imported "Rothersthorpe"—Dam, Imported "Diana," also bred by Mr. Falkner, (See A. H. B., vol. 2 p. 350,)

The above animals are of a rich red color, with a little white, and descended from some of the best herds in England.

☞ For Price, Pedigree, or to view the animals, apply to the subscriber, JOHN. P. ROE,

MUSKEGO, Waukesha Co., Wis., Sept. 1, 1856. tf.

Nursery Stock For Sale.

20,000 APPLE GRAFTS, one year, of fair size, embracing 25 of the best varieties—true to name. Price, $30 per thousand 10,000 Buckthorn Plants, for hedges, one year. Price, $5 per 1,000. 10,000 Acacia, (three thorned for hedges,) fine plants, very hardy, 2 years, price $5 per 1,000. Pie Plant, three best varieties, in quantity, from $5 to $25 per 100.

The above will be lifted about the 1st of Nov., or earlier if desired; delivered at the Railroad Depot, in Watertown or Whitewater, if in large quantity.

Orders should be sent in early.

Standard Trees of Apples, &c., in quantity; also Dwarfs and Garden Fruits of all kinds. Fine Evergreens, and large varieties of Ornamental Shrubs, Roses, &c., Root Grafts will be for sale during winter and spring—securely packed for transportation, any time.

Please call and examine, or address

J. C. PLUMB & CO.

LAKE MILLS NURSERY, Wis., Sept. 1, 1856. 3m.

FRUIT TREES.

A CHOICE Collection of Fruit Trees, Shrubs, Vines, Plants, Roses, Dahlias, Evergreens, &c., Cultivated and for Sale by A. G. HANFORD, at his Nursery, Waukesha Co., Wis.

Apple, Pear, Plum and Cherry Trees, Grape Vines, Currants, Gooseberries, Raspberries and Strawberries in variety. Pie Plant and Asparagus Roots. Houghton's Seedling Gooseberry—Antwerps and Franconia Raspberries, in quantity for market planting.

ROSES.—Hybrid China, Prairie, Moss, Hybrid Perpetual, &c. Many beautiful sorts—some of them superb.

☞ Careful selections of Fruits suitable for the Orchard and Garden, will be made by the proprietor when desired.

A. G. HANFORD,

WAUKESHA, Wis., Sept. 1, 1856. 3m.

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Madison Agricultural WAREHOUSE.

OF

SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constansly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,

Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubbing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 3, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
At sign of Pad Lock, Morris Street.

apr-tf

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND

MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6 by 6. 6. to 2. 10 by 7 ft., 1¾ & 1⅜ in. thick, two and four panels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing articles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great economy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade.

STEVENS & DONNEL.

MADISON, Wis., June, '56. tf.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit:

"Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL "

Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred assorted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.

MADISON, Feb. 1856. t.f.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1,—Third Wednesday of September.
2:—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.
COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,			$4,00
ROOM RENT,	do	do.	3,00
WOOD, (winter terms,)		do, (maximum,)	7,00
BOARD, IN HALL,	do	do	25,00
WASHING,	do	do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

CLOTHING.

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings—a Beautiful Assortment.

GENTS. CRAVATS

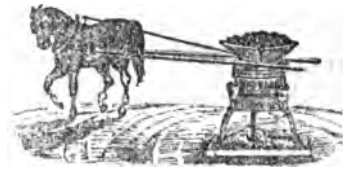
and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, MADISON, June, 1856. tf.

IMPROVED

LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 23d of February last. A Committee composed of Gov. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill. It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

Price—No. 2 Complete, $45,00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $55.00, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses. Price, $65.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis., L. A. WINCHESTER, WM. DeWOLF.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

☞ All Communications promptly Attended to. ☜

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BACON'S
MADISON
Mercantile College

Corner of Mifflin and Pinckney Streets,
MADISON, - - - - - WISCONSIN.
Branch of Bacon's Mercantile College, Cincinnati, O.

THE UNDERSIGNED respectfully announces that he has got his new College Edefice completed, the School opened for the reception of Pupils, and all necessary arrangements made for giving a more comprehensive and thorough course of Commercial Instruction than can be obtained in any other school in the Western country—and equal in every respect to the course of instruction given in my old and established College in Cincinnati, Ohio.

The course of Instruction embraces Book Keeping by DOUBLE ENTRY, as adapted to every department of Trade and Commerce; Commercial Calculations, Penmanship, Lectures on Commercial Law, the Science of Accounts, Customs of Merchants, and other Commercial Topics. The plan adopted in teaching combines Practice with Theory, and thus qualifies the student at once for the active duties of the Counting Room.

Students may enter at any time that best suits their convenience. A course can be completed in from six to ten weeks, though the time is unlimited.

TERMS:

For a full Course of Instruction, - - - - $40.00.

☞ For further particulars, address

R. S. BACON, Principal.

MADISON, Wis., Oct. 1, 1856. tf.

ANDRE LEROY'S
NURSERIES,
ANGERS, - - - - FRANCE.

MR. ANDRE LEROY, Member of the principal Horticultural and Agricultural Societies of Europe and America, and lately promoted by the French Emperor to the rank of Knight of the Legion of Honor, for the best nursery products exhibited at the World's Fair held in Paris, begs leave to inform his friends and the public, that he has just published his New Catalogue for 1856, being more extensive and complete than that of any similar establishment on the continent. It contains the prices of all the Fruit, Ornamental and Evergreen Trees, Shrubs, Roses, Camellias, Stocks, Seedlings, &c., &c., with the necessary information for importing the same.

He is experienced in putting up orders for America, and the superior qualities of his Plants have been too well appreciated during a period of 10 years, to require further comment.

The Catalogue can be obtained free of charge, on application to the undersigned Agent, who will also receive and forward the orders. Mr. A. Leroy is happy in being able to state that his nurseries were not reached by the inundation which so recently devastated a portion of the district in which they are situated.

ANDRE LEROY. Angers, France.
F. A. BRUGUIERE, Sole Agent,
138, Pearl Street. New York.

OCTOBER, 1, 1856. 3m.

A RARE CHANCE!
A FARM IN WAUKESHA COUNTY
FOR SALE.

A FARM of 300 acres, in the town of Delafield, situated on that Splendid Road from Waukesha to Delafield. It has a good House and Barn, and is otherwise under good improvements, and will be sold for $4,000 on easy terms. It lies within one hour's ride of M. & M. & M. & W Railroads. It is known as the "Kellogg Farm."

For particulars inquire of

J. S. FILLMORE.
No. 2 Juneau Block, Milwaukee, Wis.

OCTOBER 1, 1856. tf.

NURSERY STOCK
FOR SALE.

40,000 Apple stocks, 2 years old at $5 per 1000.
5,000 Mozzard Cherry do, 1 year old at $8 per 1000.
3,000 Horse Chestnuts, 1 yr. old, at $20 pr. 1000 or $2,50 per 100.
1,000 American Mountain Ash, 2 yr's old, at $3 per 100.
Apple scions of leading varieties at $5 per 1000.
Pear and Plum scions at $3 per 100

Address, STICKNEY & LOVELAND,
Box 463, Milwaukee

NEW MILLINERY STORE.
NO. 4, WASHINGTON AVENUE,
MADISON, - - - - - WISCONSIN.

HAVING just returned from the East, with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the Ladies to my newly selected Stock of

Bonnets, Ribbons, Flowers,

and a general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS, and

SILKS AND CASHMERES,

together with an elegant lot of Dress Goods. Also *YANKEE NOTIONS*, in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis., June, '56. tf.

City Crockery Store.
No. 156 East Water Street, Milwaukee, Wisconsin
M. G. ELMORE & CO.,
Importers and Wholesale and Retail Dealers in China, Glass and Earthen Ware, Lamps, Brittania, and House Furnishing Wares, and Manufacturers of Looking Glasses.

THE Subscribers having recently established a house for the sale of the above Goods in this city, respectfully solicit a call from buyers. We have the Largest Store, the Largest Stock, the Finest Goods, and will sell Lower than Goods have heretofore been sold in this or the Chicago market.

CROCKERY.—Our assortment is unsurpassed—having recently received of our own Importation a large Stock, T. & R. Boote's manufacture and the newest patterns.

CHINA.—Rich, White, Gilt and Decorated, Tea and Dinner Sets—varying in price from $8 to $300.

GLASS.—A large variety, both Cut and Pressed, among which may be found the New Diamond Goods.

LAMPS.—Both Hanging and Stand—for Oil, Camphene and Fluid, new designs.

LOOKING-GLASSES.—From the cheapest to the Best French Plate.

GAS FIXTURES.—The largest assortment of Cornelius, celebrated manufacture. Some very rich patterns, as high as $150 a Chandelier.

TABLE CUTLERY.—Silver Plated, Brittania, Japanned and Planished Tin Wares. In fact, a complete assortment of all the Goods usually kept in a first class Crockery Store.

FANCY GOODS.—We have a Stock formerly comprising the "Temple of Fancy," which we offer At Cost, having bought them to get possession of the Store now occupied by us, and wanting the room now occupied by them for the Crockery Trade.

M. G. ELMORE & CO.

MILWAUKEE, Wis., Sept. 1, 1856. tf.

LANSING BONNEL,
89 & 91 *East Water Street, Milwaukee, Wisconsin,*
MANUFACTURER OF

THE Celebrated King of Stoves and Forest Oak, (two of the best Stoves ever made.) Also, every variety of Box and Parlor Stove. Tinners Stock, in any quantity. Agent for the sale of Herring's Safes, Fairbank's Scales, and Spratt's Self-Sealing Cans, for preserving in a fresh state Fruits and Vegetables.

☞ Circulars of all the above articles will be sent on application to me.

MILWAUKEE, Sept. 1, 1856. tf.

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DECEMBER, 1856.

WISCONSIN FARMER AND NORTHWESTERN CULTIVATOR.

PUBLISHED MONTHLY,

BY

POWERS & SKINNER,

MADISON, WISCONSIN.

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Janesville AGRICULTURAL WAREHOUSE —AND— SEED STORE.

ELDRED BARROWS & CO.,

Wholesale and Retail Dealers,

HAVING opened an extensive establishment for the sale of Agricultural Tools, Farming Machinery and all kinds of Seeds—would respectfully call the attention of the Farmers of Rock and adjoining Counties to their Stock, comprising the *latest and best improvements*, purchased with care, direct from the most approved manufacturers.

We would invite a particular examination of our stock of Steel Plows—consisting of the Massachusetts, Chicago, Moline, Wisconsin, and other patterns. We have also a large stock of Horticultural Implements, from late importations.

Seed Department.

We shall give *especial attention* to this Department, and shall at all times keep a full supply of the choicest *Field, Garden and Flower Seeds* in their *season*, selected and put up *expressly for our own sales*, all of which will be sold *cheap for cash*.

AGENTS—for Eastern Manufacturers—Pitkin's Osage Orange Seed for Hedges, (with directions for raising)—and for the "Wisconsin Farmer."

CASH PAID FOR CLOVER AND GRASS SEED.

P. S.—To those dealers who purchase West of the Lakes, we offer every inducement to buy of us, as we can furnish all articles in our line at the lowest possible prices.

Corner of Milwaukee and River Streets, west side of the river.

JANESVILLE Aug., 1856. tf.

DURHAM BULL FOR SALE.

THE subscriber offers for sale, his thorough bred Durham Bull "Favorite," now 18 months old. He is one of the finest animals in the State, with a perfect pedigree, from the herd book. Any individual, or neighborhood, wishing to improve their stock, can make an excellent bargain for him. We offer him for sale on account of having embarked our entire herd of 40 cows in the milk business, leaving no opportunity to raise calves. He will be sold low, and on any credit desired, on approved security. Any further information can be given by mail or otherwise.

SHEEP.

I have still from 100 to 150 first rate Spanish and French grade sheep for sale, all ewes, and as good as could be wished from which to start a flock. I will sell them in lots to suit purchasers, on one and two years credit, for good notes. Those wishing to buy will do well to apply soon. D. J. POWERS.

TO YOUNG MEN.

PLEASANT AND PROFITABLE EMPLOYMENT.

YOUNG MEN in every neighborhood may obtain healthful, pleasant and profitable employment by engaging in the sale of useful and popular Books, and canvassing for our valuable Journals. For terms and particulars address, prepaid,

FOWLER & WELLS,
308 Broadway.

P. S. All Agents who engage with us will be secured *from the possibility of loss*, while the profits derived will be very liberal.

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1865, Sept. 15,

WISCONSIN FARMER,
AND
NORTHWESTERN CULTIVATOR.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANIC ARTS AND EDUCATION.

VOL. VIII. MADISON, WIS., DECEMBER, 1856. NO. 12.

SUGGESTIONS FOR DECEMBER.

See Winter comes, to rule the varied year,
Sullen and sad, with all his rising train;
Vapors, and clouds, and storms.—*Thompson.*

DECEMBER is the closing month of the year, and if not so well adapted to out-door employment as some other seasons, it nevertheless has plenty of duties important to be attended to. The severity of our climate renders a constant watchfulness necessary to guard against damage. A fifty-cent thermometer hung in the cellar, will always indicate the frost point, and tell of approaching danger.

The experienced farmer need not be told how important it is to bestow good and timely attention upon stock, and all sorts of animals, at the opening of winter. Neglect in the outset will prove a much greater damage, than at the last end of the winter; as much worse as a man who gets lame at the outset of a journey, will find it harder to perform it than if he had kept well until near the close. Look well, then, to all your creatures in season. Recollect that a nice warm stable is the very best blanket for a horse; and that a thorough currying and brushing, night and morning, and a clean and ample bed to sleep on, is better than an additional peck of oats. When, perchance, you come home, through the storm and cold, and your good horse is splashed all over with mud and water, think not that your whole duty is done when he is hitched in the stable and fed with hay and oats; but see to it that he is rubbed and cleaned, before the sweat fairly cools on him —otherwise he will take cold, and become prematurely old and worthless. The horse is the noblest of animals, and the man who neglects or abuses him is the greatest brute of the two.

We have often pitied the drunkard's horse, almost as much as the drunkard's wife and children, subjected as he is, to stand tied to some bleak, cold post, through the long, lone hours of a winter's night, whilst his master is carousing inside, and spending his last shilling, with that *most despicable of all human beings, the liquor seller.* But humane men must still continue to see such sights, and horses to suffer, until the world is at least half civilized, which we think will hardly be in the present century.

Are your stacks all secured from the marauding and waste of starving cattle, and is your straw in a condition to be made useful? Let the creatures pick it over for a lunch during the day, then make them a bed of it at night; and when unfit for this use, then incorporate it in the manure heap; or, if circumstances require it, put it through your straw-cutter in the first instance, and after mixing it with meal, bran, or roots cut fine, feed it in this shape to anything, and it will not hurt it. Above all don't allow it to lay in an unsightly pile, somewhere in the way, until plowing time, and then undertake to burn it. When we see the straw of a farm thus burning, we always conclude that the place is already under mortgage, or soon will be; at any rate, it cannot long escape that worst kind of mortgage—an impoverished soil.

Look well to the wood pile, at your earliest convenience; and see that the stock is ample for the whole year to come, and not only ample but nicely cut up and piled for summer. Recollect that every cord you have to cut in the summer will cost you at least a dollar; besides, who ever saw a sharp ax to chop with in summer? When you are a little tired with chopping, step across the lot for a few moments, and see if the rabbits or mice are gnawing your apple or other trees; and if so, take prompt precautions to prevent it. It may easily be done, even in winter, in a dozen ways, some of which will readily suggest themselves to any one who has read the FARMER for the last year.

Look well to the plants, vines, vegetables

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and roots that have been covered for winter. See that no swine get their snouts nigh them, and that no animals browse the trees; for what will it avail towards an orchard, when the young twigs grow six inches each year and are bitten off eight? Have a sharp eye to everything about your premises—outside and in. Have the lantern handy for any emergency, at a moment's notice. Then if "Old Broad" gets loose, and hooks "Lineback," it will not take half an hour to arrest the mischief. Be the last to retire at night, and not until you have seen all the fires carefully secured, and where the ashes were put that were taken up during the day. (Many people, especially easy kinds of folks, think there is no danger in putting them in a bandbox, and setting them under the bed.) Few seem to know that millions are annually destroyed, and usually the property of the poor, by the careless handling of ashes. All safely secured, and the doors fastened, and the careful man can retire with a consciousness of all duties done, and if he has a clear conscience, can sleep well till the cock crows for morning; and he can arise refreshed and cheerful for the duties of the coming day. And he who would perform those duties well, should arise early during the short days of winter. "One hour in the morning is worth two at night."

All, doubtless, recollect what we said in the last number about visiting the district schools. Let us hope it is being heeded, and the schools are the first care of all—whether our own children attend them or not. The millions of children in our common schools, will soon be the masters and mistresses of all we are striving so hard to gain—and the nurses of such of us as live to old age. Let us then look well to their training. The most ragged boy we meet, may yet be our son-in-law or brother; our master or servant. Let us then despise no one we meet, but labor to elevate and improve every child of the human family.

The close of the year suggests another important duty, which none should neglect, and that is the settlement and squaring up of all accounts and demands, between yourself and your neighbors. This is a duty that none should neglect, however limited their business. "Short accounts make long friends." Look up your accounts with the merchants and mechanics—even if you can not pay them, settle them up, and know how you stand. Those who neglect to do this from year to year, will always find their outstanding debts larger than they expect, and be very apt to think they are cheated; and they will be more than lucky if they escape law suits and bickerings in the end. We have long been of the opinion that a law rendering an account uncollectable if it lay over a year unsettled, or unsued, would be a blessing to community, simply because it would compel all to make frequent settlements, and save nine-tenths of the law suits and misunderstandings that now arise. How many men let the golden opportunities go by, when they have plenty of time, and leave all their business matters lingering along; perhaps their title deeds unrecorded, perhaps a note omitted to be taken up when paid, perhaps a receipt omitted to be passed when a settlement is made, or perhaps their names put on another's paper, without any knowledge of their circumstances or indemnifying security—when, in the midst of all this neglect, Death, that great settler of all accounts, steps in, without warning or ceremony, and closes the scene. Now comes a job for the administrators; what might have been done in a moment during the lifetime of the deceased, and for little or no expense, is now perhaps the labor of days, or weeks, for those who do not understand all the circumstances in the case; and of untold expense. Widows and orphans are robbed and cheated, and estates go to wreck, and all for the want of a little promptitude and attention to one's own affairs. This is no fancy picture, but true of thousands of cases occurring every day, as our Probate Courts can all attest.

In conclusion then, we would say to all, whether in large or small business, to keep it as snug as possible, and settle everything that can be settled, at the close of each year, without fail. Then when the new year dawns upon you, you can meet your friends with a smile, and open new books, and start anew the yearly race with joy—especially if you have not forgotten to subscribe anew for the FARMER, for 1857, and to induce your neighbors to do the same. We deem it particularly important to mention this fact—inasmuch as this No. closes the Vol. for 1856.

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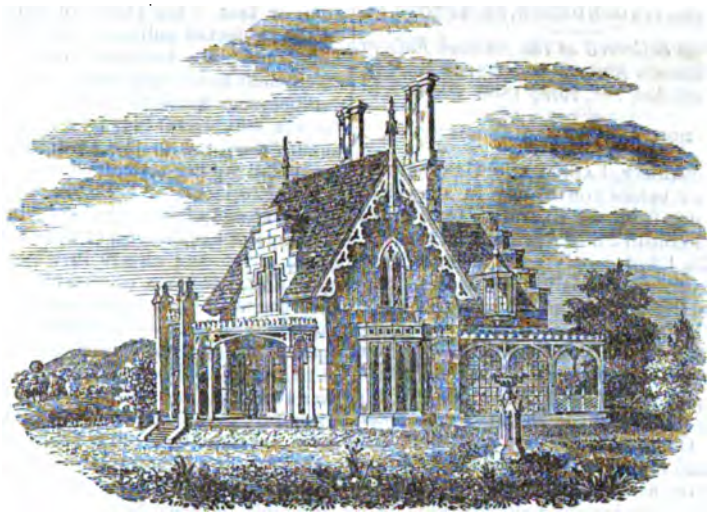

ENGLISH COTTAGE.

The above is a beautiful specimen of a cottage of the English style, originally published in Downing's Rural Architecture. Wishing to see them occasionally adorning some of our beautiful valley landscapes, we present the plan for imitation. The interior admits of a convenient and tasty arrangement, and the exterior, when embellished with a proper surrounding of trees and shrubbery, cannot well be excelled.

The plan may by some be thought too labored and costly for this new country; but as we promised in the outset to furnish some more expensive plans, and having thus far presented mainly cheap ones, we wind up the volume with this neat design.

We shall carry our architectural articles through the next volume, and embrace a wide range of subjects, and with more and better embellishments than during the past year. Our hope is to diffuse a better taste through community at large on this subject, and we have faith to believe it can after a while be done. In the language of Downing: "A blind partiality for any one style in building is detrimental to the progress of improvement, both in taste and comfort. The variety of means, habits and local feelings, will naturally cause many widely different tastes to arise among us; and it is only by the means of a number of distinct styles, that this diversity of tastes can be accommodated. There will always be a large class of individuals in every country, who prefer a plain square house because it is more economical, and because they have little feeling for architectural, or, indeed, any other species of beauty. But besides such, there will always be found some men of finer natures, who have a sympathetic appreciation of the beautiful in nature and art. Among these, the classical scholar and gentleman may, from association and a love of antiquity, prefer a villa in the Grecian or Roman style. He who has a passionate love for pictures, and especially fine landscapes, will, perhaps, very naturally, prefer the the modern Italian style for a country residence. The wealthy proprietor, either from the romantic and chivalrous associations connected with the baronical castle, or from desire to display his own resources, may indulge his fancy in erecting a castellated dwelling. The gentleman who wishes to realize the *beau ideal* of a gennine old English country residence, with its various internal comforts, and its spirited exterior, may establish himself in a Tudor villa or mansion; and the lover of nature and rural life, who, with more limited means, takes equal interest in the beauty of his grounds or garden (however small) and his house—who is both an admirer of that kind of beauty called the picturesque, and has a lively perception of the effect of a happy adaptation of buildings to the landscape—such a person will very naturally make choise of the rural cottage style."

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WISCONSIN—ITS CONDITION, PROSPECTS, &c.

An Address delivered at the Annual Fair of the Wisconsin State Agricultural Society, in Milwaukee, Oct. 10th, 1856.

BY HON. A. CONSTANTINE BARRY.

Mr. President, Ladies and Gentlemen:—I appear before you to-day in answer to an invitation from the Executive Committee of the Wisconsin State Agricultural Society. And while I feel deeply grateful for this expression of their partiality, I also feel that I am unworthy of the honor conferred upon me. This feeling arises from a consciousness of my inability to meet fully the demand of the occasion, in the discussion of those topics which shall be adapted to the time, the place, and the audience who listen to me. Once a farmer-boy—initiated into the art and mysteries of farm-life, and now a farmer on a very small scale; yet a quarter of a century devoted to professional duty, and the thought and study attendant upon the same, have measurably drawn my mind away from subjects which only are adapted to occasions like this. I have but little familiarity with them. Still, I have ever strongly sympathized with the working-man of whatever trade or occupation. I respect and honor him, however humble his birth or position—I extend the hand of brotherly friendship and regard to him. I like the look of that face made brown by daily exposure, and those hands hardened by daily toil, equally with the pale brow that is seamed by thought, and the inky fingers that guide the mighty pen, or manipulate the printers' type. I read here the signs and proofs of true nobility; for labor is noble—it is manly to work to earn the bread that we eat, and the comfortable homes in which we live, and the clothing we wear, and the sweet sleep which refreshes us by honest toil—by the sweat of the face, and the sweat of the brain. And for six thousand years God has been confirming the truth of this by an ordination of his, that the idler, the drone, the sponge, shall not eat well, nor sleep well, nor feel well—in short, that he who is too lazy to work, has no right to live!

If, then, from my sympathies with the laboring-man, and from the little thought and reflection I have been able to bestow, I may be able to draw something that shall add in some small degree, to the interest and profit of this annual occasion, it is all I can promise to do. It was the manifestation of friendly feeling that brought me here, and I may trust that the same feeling will kindly and charitably overlook all that is wanting or inappropriate in my remarks to day.

Do not think, however, from what I have said, that I am going to preach you a sermon, or that I am about to harangue you on the subject of politics—I shall do neither. This is no place for party feeling or party excitement to obtrude itself. On this holiday occasion we should remember only that we are neighbors and fellow citizens, and devote the time to the legitimate purposes for which we are assembled.

Mr. President, and Fellow Citizens, we live in an age of stirring and thrilling events—an age of excitement, of discovery, of progress, of reform; an age in which is developed, and now are in process of development, the results of long-operating causes. The thought and labor of hundreds of years are concentrating in the movements and changes of this noon of the nineteenth century. You do not need to be told that nothing comes to maturity at once, but only by a progressive development. The grain which we commit to the bosom of the earth, is not by one great effort of vegetative power, immediately returned to us in waving fields of yellow corn. Through the quickening power of the soil, and under the influence of sun, and rain, and dew, there must first be germination, then growth, or simple organization, then bud and flower, and then matured fruit, ere we can thrust in the sickle, and reap the ripened harvest. So it is in the animal kingdom—no being starts at once into life in the full maturity and vigor of all its powers. Whether man or animal, there are the same gradual processes, the same progressive development, as in the vegetable world. Even the earth, which we inhabit, owes its original formation, and its present condition and aspects, to processes and changes which required millions of years, if not of ages, for their completion.

The same law of gradual and progressive development, or growth, governs also with respect of the intellectual and moral condition of the human family. Slowly, and at times by almost imperceptible degrees, this condition has been improved by the increasing means, and the constantly adapting agencies of mental and spiritual enlightenment and culture. The race has not suddenly sprung up, but has *grown*, through successive periods of developement, to its present stature. It has passed the age of its infancy, and in some measure has put away its childish things. Discovery has succeeded discovery. New light has been constantly pouring from the full ocean of infinite wisdom into the souls of men. New, and more glorious dispensations of grace and mercy have succeeded each other; ancient mysteries have been cleared away—the old and worn out rubbish of church and state swept from the path of progress, and sublimer and more enrapturing truths revealed to the human heart and understanding.

We see, too, how that human governments

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are the result of development—the offspring of growth. The American Revolution, and consequent American Freedom and Republicanism, came as the natural and inevitable growth of the world and of man. There had been first the blade, then the ear, after that, the full corn in the ear. And when the fruit was brought forth, the husbandman put in the sickle, because the harvest was come. So, then, the American Constitution and Union, and our free Democratic Government, were not born of a night, and matured in a day, but were the results of a long series of progressive development, controlled by infinite wisdom and goodness—results necessitated by the very position to which the American people had attained. "With such a people as the settlers, and revolutionists of this country, with their political culture and experience, their knowledge of the nature and ends of government, and their education, and religious temper, colonial dependence was an impossibility, and this free government a simple necessity—the natural fruit of a natural growth. The boy had grown to be a man, and if the obstinate old father, respectfully asked, would not give him a freedom suit, there was but one thing left for him, and that was to take it,"—and take it he did, and has worn it ever since; though many will have it, that it hangs rather loosely on him at the present day!

Not only in the departments to which I have briefly alluded, but in all others—in the department of art and science, of philosophy and religion, the law of growth and of progressive development, prevails and governs. The steamboat, the railroad, the power press, the telegraph, the daily newspaper, the threshing machine, the reaper, and the *baby jumper*,—all are the results of the operation of this law.

This law, too, has had something to do with the settlement and growth, of the mighty valley of the Mississippi. Under its operations, vast changes have been wrought and are taking place continually. Look out, over this broad western land, and behold it inhabited, where but a few years ago the wild deer stalked, the ferocious wolf prowled, and the wild Indian roamed the savage monarch of all. From the rugged shores and the mountains and valleys of New England—from the proud old Empire State—from the sunny South—from the British Islands, across the seas and from far off "Fatherland," we have come to people the solitudes beyond the great lakes. The forests have been swept away, the rich mould of the prairie turned by the busy plow, towns and cities builded, railroads constructed, a large and prosperous commerce established, and the foundations of wealth and greatness laid deep and strong.

As an example and evidence of the change which a few years only have wrought throughout the length and breadth of our new state, with a few exceptions, look out upon this young and vigorous city, with its beauty of location, its stately business places, its long line of pleasant and tasteful dwellings, its many and rich facilities for trade and commerce, and its busy and enterprizing population. Within a very brief space, here has sprung up from the bosom of the wilderness, by lake and river, a city of nigh fifty thousand souls—full of activity, enterprise, prosperity, and the comforts and elegancies of life. And for this, it has not been indebted to the investment of rich capital, and the magic charm of money from abroad. They who have builded this city, who own its pleasant homes, who have created for it its business and prosperity, and have shaped for it a glorious destiny in the future, possessed little else, many of them, save the capital with which God had furnished them—the strong arm, the courageous heart, the enterprising spirit. This capital they invested to the best advantage; in other words, they rolled up their sleeves and went to work; and while they trusted in God, they kept their powder dry. Here, before us, is the present result of their privations and labors; the future results, we predict, will be glorious indeed.

So throughout our state, men like these have wrought amid hardships and privation—forsaking the comforts and refinements of eastern homes, for the dangers and exposures of frontier life, until the wilderness has blossomed with the fruits of their toil, and these once western wilds are vocal with songs of joy.

In a commonwealth thus settled and improved, full of enterprise and prosperity, full of busy industry and increasing wealth—pressing continually onward, in its upward and prosperous way, and concerning itself in all great measures and means of improvement, we are met together to day. At the close of a fruitful season, with the tokens of divine goodness lying thickly around us, we have met together to congratulate each other, to vie with each other in the productions of the soil, and the creations of our invention and skill, to celebrate this our annual harvest home, with festive sports and rejoicing! And why may we not now, in view of this goodly land which God has bequeathed to us for an inheritance, and of the pleasant homes in which we dwell, and the prosperity which attends us in our every calling, and our increasing means and facilities for improvement and wealth—why may we not, I say, in view of all these rich blessings, consider the command addressed to us:— "Go HOME TO THY FRIENDS, AND

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TELL THEM HOW GREAT THINGS THE LORD HATH DONE FOR THEE!"

A learned and distinguished gentlemen of Massachusetts, Ex-Gov. Boutwell, has recently undertaken to disparage the west, and to give it a bad name, by instituting an invidious comparison between it and the east. In a long and labored address he attempts to prove that this great Valley of the Mississippi, and particularly the north-west, is altogether "flat, stale and unprofitable."—The surface of the country is level and monotonous—the soil destitute of proper cultivation, and therefore unproductive—the people indolent and thriftless—the general condition of things far from hopeful or promising—in fine, the country and its inhabitants are interior, impoverished, unfruithful, with a tendency to absolute barbarism. He means of course, compared with the people and the country east, and as proof of what he asserts, he introduces figures to show that Massachusetts and Vermont far eclipse Ohio, Illinois and Wisconsin in the amount of their products, not because they have a more fruitful soil and accessible surface, or a general condition of things more favorable to agricultural success; but because we with all our advantages of surface, soil and climate, lack the intelligence, enterprize, industry, energy and skill of the people of New England. Now I am far from wishing to disparage the two States brought forward in the comparison. I am frank to confess that they beat us in growing granite and trap—that their hills are superior to our own—that their mountains are magnificent and sublime—that they abound in bold and gorgeous scenery, and posses many enchanting spots amidst green hills, by dashing waterfall, in mountain gorge and valley nook. Neither do we deny to them "fair women and brave men," and we humble ourselves before the mighty and majestic spirits to which they have given birth. We concede them superior educational advantages, and we honor the land that grows Yankee schoolmasters! But in broad rivers, in beautiful lakes, in sunny slopes, in towering bluffs, in deep and dark ravines, in mighty forests, in prairie undulation and mound—in almost every variety of natural scenery, as well as in fertility and productiveness of soil, we can "beat them all hollow." Some of the grandest and most inspiring scenery upon which my eyes ever rested, is found in the north-west, and no man with a particle of soul, ever stepped upon our broad, rolling prairies, without being awed by their solemn grandeur—without having a broader scope given to his thoughts—without feeling the area of his freedom enlarged. And then as to the enterprise, activity, industry, progressiveness and intelligence of our people—look out upon the evidences of them all around us; see them in the developed resources of the State—in our productive farms and their improvements—in our numerous and thriving towns, villages and cities—in our hundreds of miles of railroad already completed—in the number of our newspapers, and in the general prosperity which reigns within our borders. We are not so indolent and thriftless a people after all, and the tendencies to barbarism are yet to appear.

But even here, we concede, very much remains to be done, by way of developing the Agricultural resources of the State, improving our system of farming, and elevating a most honorable occupation from the comparatively low place which it has hitherto been assigned. Not a few have already learned to their great advantage, and to the credit of our State, that improvements may be made in the art of Agriculture as well as in others; and that the discoveries of the age and the developments of science, are furnishing agencies and means for the promotion of its interests. But there is still room and need for other and greater improvements. So far as the many are concerned, only a part of a small portion of the science of Agriculture is known; and men are slow to apply new truths, and to make use of new and wisely adapted means in the cultivation of the soil, and the general management of the farm. They hold fast old modes and practices, and with all the light they now have make slow progress.

We are fare from supposing that mere *book knowledge* will render men good farmers; but we do contend that it is absolutely essential, for the successful prosecution of the business of Agriculture, that the nature of the materials with which we have to deal—the capabilities and deficienices of the various soils—their adaptation to the various crops to be grown, and how they should be cultivated with reference to the most abundant yield,—together with the proper rotation of crops—the right application as to time, place and quantity of appropriate manures, should all be carefully studied and well understood.

Agricultural societies and fairs, and our agricultural journals, are aiding largely in the work of improvement to which I have refered. The exhibition which we have here witnessed—the fine display of farm produce and of stock, from the rich fields of Wisconsin—the occasion furnished for combining the experiences of hundreds in the several departments of their one pursuit, and for mutual advice, counsel, instruction and encouragement,—all are calculated to incite to improvement, to awaken a spirit of healthful competition, and to lead on to prosperity and wealth beyond what can now be conceived.

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But more aids are required than these can supply. It is particularly needed that the profession of agriculture be made one of the *learned* professions. It is a very great mistake, "that there is less talent required for a thorough knowledge of the science of agriculture than of other pursuits, or that less time or attention are necessary; and the very erroneous opinion that every man may succeed in the occupation of farming without reflection or experience, has resulted in injury only. It ought to be understood, that no man can be a farmer by instinct—any more than he can be a lawyer or a physician by instinct.

He needs to be educated—he requires all the help that can possibly be furnished him. The business of agriculture has been considered degrading, because those engaged in it have been content with a low standard; and farmers, even, have helped to bring it into disrepute, not only through a lack of self-improvement, but by devoting the genius, talent and energies of their sons to others, and as conceived, more respectable callings. They have thus voluntarily conceded that the pre-requisites for eminence in other pursuits were not essential to the profession of agriculture—that with no talent, genius or skill, a man might be a farmer, but he would not answer for any other trade or profession.

No good and sufficient reasons can be urged why agriculture should not be taught as a branch of learning in our common schools—none why in these schools it should not have its competent instructors, its libraries, its apparatus and cabinets. At least there should be an agricultural department in our high schools, academies, colleges and universities, where our young men who design following the profession of farming may be suitably educated for their high and dignified calling.

Some few States have gone nobly forward in the discharge of their duty with reference to the long neglected profession of agriculture. Maine took the lead in this great work, and established its schools principally devoted to scientific and practical instruction in farming. Connecticut, I think, has an agricultural school—so has Massachusetts and New York, and if I mistake not, professorships of agriculture in several of their colleges. And shall Wisconsin, though among the last to be admitted to the sisterhood of States, be the last, intelligent and progrissive as she is, to undertake so important, so noble a work? No—she will not be behind—she has the will and the means requisite, and will move forward to dispute, through the porvisions she shall make, and the agencies she shall put into operation, the palm of agricultural interest, thrift, prosperity and wealth, with the oldest States in the Union.

There can be no better time than the present, for securing the *desiderata* of which I have been speaking. A portion of the proceeds of the Swamp Lands, when sold, might be set aside as a fund for the endowment of an Agricultural College, and the purchase of lands for a Model Farm. These can be obtained far more cheaply now than at some future period. And when once such a school with its modle farm, has been established on a permanent basis, the most important results are sure to follow. "Agriculture is suddenly raised from its abasement, and placed on equal ground with any other pursuit, by becoming a part of a liberal education. It, too, has at last its students. The professor, equal to his task, extracts light from every kindred science. His theories may be tested by experiment on the adjacent farm. Thus, too, every invention and every improvement of this fruitful age, connected with rural economy, may pass the crucible of actual experiment; every quackery exposed, and real utility ascertained; every seed and every plant gathered from distant nations, cultivated; every animal, in every variety bred; and the youth of Wisconsin, eye-witnesses of all, to adopt or reject as the result recommends, and thus rapidly to diffuse the advantages through every part of the State. Without some advantages of this kind, the most valuable improvements are confined for years to particular neighborhoods. It is too hazardous for individuals, warned by frequent impositions or frequent failures, to encounter the cost and consequent risk of making experiments." These considerations plead loudly for agricultural schools—they knock at the door of the Capitol, and with earnest petition address those who have in charge the interets of the State.

But there are other considerations beyond these more important still, and which should move every true man to earnest, unyielding efforts on the behalf of the long neglected, long abused interest of agriculture. Place it on a level with other and krindred interests—let the same generous provision be made for its advancement and elevation—let the same legislative aid be extended it, and let it have its bountifully supplied and wisely adapted means and facilities, and the results in a moral point of view could hardly be computed because of their magnitude. The Profession of Agriculture, returned to its original position and rank, "ennobled by the fostering hand of government," is at once shorn of all that now renders it repulsive, and made attractive and dignified with learning, adorned with science and philosophy, vigorous and healthful because of improvements, it invites and wins, and an influence

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goes out from it to water and make green the parched and desert-places of the world. Other professions now crowded because considered more honorable, would be relieved of their burthening excess of numbers, and there would be less hungering and thirsting for office—less of scrambling on the part of lean, starving applicants for the "spoils of the enemy." The dram-shop and the corners of the streets would send forth their myriads to walk regenerated upon the face of God's green earth, and with the strong hands God has given them to earn an honest living by the sweat of their brow.

I cannot close my remarks without calling attention to the general diffusion of competence and of the means of prosperity throghout our borders, and to our duty with respect of the same. It is a happy thought, that amidst all the changes by reason of adversity and misfortune, there is but little real and incurable wretchedness in our midst. The means of employment lie all around the unfo tunate. With the millions of unoccupied acres still left, waiting to reward the hand of patient industry with comfort and wealth—a thousand avenues open to enterprise, business and competency—here is a common fund for every man's exigencies, and the invitation to all is, "come up and possess." Already, by God's blessing, we are not only feeding ourselves with the abundance we possess, and feeding the poor we have among us, and feeding Vermont and Massachusetts, but are helping to feed the world! Contrivances for comfort meet us at every door we enter. Every where the table is spread, and the cup is filled; and every where we find men ascending from convenience to comfort, to neatness, to elegance, to luxury, to profusion.—Such is one of the peculiarities of our social condition.

How long this enviable state of good fortune shall continue, is left for us to determine. If we grow neglectful of our highest interests because of the greatness of our national prosperity, that prosperity shall suddenly come to an end. We must carefully guard against the encroachments of luxury, and beware how we contribute to the corruptions of our age by giving up ourselves to amusements or merely sensual pleasures. To press onward to still higher attainments, and a still higher position—to do more and to be more to-day than yesterday, to-morrow than to-day—this is what gives character to a people, and under the advantages of their social condition as enduring as the everlasting hills.

The old Connecticut Charter, which was deposited in the trunk of the Charter Oak, has been enclosed in a frame of wood of the tree which preserved it 169 years ago.

INDUSTRY OF MASSACHUSETTS,

Mechanical Ingenuity, the secret of her progress.

We are indebted to some friend, whose name we could not quite make out, for a copy of a volume under the first part of the above title, exhibiting in full, the various industrial pursuits of that state. The number of persons employed in each, with the amount of capital, and the value of the respective products.

It is an instructing record of a remarkable state, and shows an aggregate, that is truly surprising.

The old Bay State is becoming a perfect bee hive of manufactures. Whilst its population has increased only 34 per cent. in ten years, from 1845 to 1855, the value of her industrial products have increased 138 per cent.; and the capital invested in said business has more than doubled. These facts furnish much material for reflection, and afford ample study for the statesman, economist or philosopher, to know and comprehend the cause of her rapid progress in production and wealth.

The entire result, is probably based upon one simple fact, merely the thorough and efficient employment of time; not of a part of the people, but of all of them, men, women and children. It may be truly said, that Massachusetts tolerates no idlers in any walk of life. Her wealthier men, work in some vocation, as well as the middle and lower classes. A person without employment, or visible means of support, is at once considered a doubtful character, and watched and distrusted.

Idle loafers, hanging about country taverns, and small towns; pitching horse shoes, running horses, talking slang, and drinking whiskey swill; or in larger towns, patronising billiard saloons, ten pin alleys, and one horse theatres, (in western style) are a class, almost, or quite unknown among them. Every body has their calling, and every hamlet its bell, to regulate the motions of all like a machine.

This systematic and uniform industry is the first great point. The next thing is, their extensive and universal application of the best labor saving machinery in the world, to almost every avocation. These, combined, produce the wonderful results we see, in their industrial report. The value of

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their productions averages over $1,200 to each hand employed in their growth or fabrication, and on a capital of less than $500 to each person. And it must be remembered, that probably one half of these laborers are females. What other part of the world can show as large results on their labor? None we trow.

The value of their boots and shoes, annually made, is $37,480,923, almost one half more than her cotton goods, the next largest item, $26,140,538. Next, her woollen goods swell up to over $12,105,514. Her leather, amounts to about the same sum. Her alcohol, liquor, and beer, $3,509,667, only falls a trifle short of the cost of her bread, $3,592,609, (that is almost equal to some parts of the west, where it takes two bbls. of whiskey to one of flour). The value of her milk, $755,887, only slightly exceeds the value of her ice, $639,100. Her tin ware, amounts to $1,451,240. Her glue and gum, to $532,650. Her combs, to $557,422. Her whips, to $505,500. Her straw bonnets, hats, and braid, to $4,905,553. Thus, the straw of Massachusetts, amounts to almost half as much as the wheat crop of Wisconsin. Her whole annual product, aggregates up to a fraction less than $300,000,000, thus making her yearly earnings, a good deal more in amount, than the entire property of Wisconsin put together. And the great bulk of this, earned by 245,908 men, women, and children, with the aid of $490 capital, each, in machinery, and tools to work with. Thus wonderful are the results of systematic labor; especially when seconded by labor saving machinery.

Massachusetts has considerably more than doubled the products of her industry in ten years; nor is she flagging in her course; no doubt each recurring decade, will witness equal progress; not through any increase of her industry, for that is impracticable, but by the development of new enterprises, to employ it more profitably, and infinities of new machinery to expedite every process.

This brings to light an important fact, that every body does not yet understand. Simply, that the inventive ingenuity of the age, is its most remarkable characteristic, and the true secret of all our rapid and wonderful progress.

Man tills the soil just as of old, until the mechanic puts, not a new song into his mouth, but a new and improved tool, or machine into his hands. He plods over the same country road, at a ruinous rate in time and money, until the engineer lays the rail, and the mechanic puts on, not the 'Morgan,' or 'Black Hawk,' but the *Iron Horse.* And how the snorting of that horse wakes up the country it traverses to a new life and being. The granite rocks, and mountain forest, are turned to gold; the wilderness is populated and remote countries brought nigh together. The hitherto quiet hamlets and valleys, clang with the music of machinery, the idle and unemployed find work through all seasons, and money flows in weekly or monthly currents, where little was seen before. Machinery is the right bower to human industry, and the two coupled judiciously together, either in agriculture or the arts, are bound to achieve the greatest of human triumphs. We shall again refer to the importance of machinery and the mechanic, and endeavor to show, what we fully believe, that the inventor is the true architect of this wonderful age; and the greatest among men, when rated by the results of his labors. Massachusetts proves it, and every thing in the country proves it. The engineer and inventive mechanic, has become the great man of the age, and the lawyer, the doctor, and the mere old fashioned professional man, is comparatively, going into the shade. Such as do not see it, read not the signs of the times aright.

AGRICULTURAL BUREAU AT WASHINGTON.

We learn, says the Country Gentleman, from one who has recently visited this department of the Patent Office, that it is gradually gaining in usefulness and importance to the interests of the agricultural public. An appropriation of $30,000 has already been made by the present Congress, and a further appropriation of $70,000 will be asked for before the close of the session, making in all the sum of $100,000 for the current year.

About $20,000 are to be expended for seeds and cuttings. About forty bushels of English turnip seed has recently arrived at New York, and is now probably in the process of being distributed. The Bureau received at the same time four hundred bushels of peas, and seven hundred pounds of early York cabbage seed.

One thousand bushels of wheat have been ordered from the Mediteranean. In distrib-

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uting this wheat, especial reference will be had to experiments in cross-foundation, by which it is thought new and valuable varieties of wheat may be obtained.

Dr. Parker, U. S. Commissioner to China, has had $1,000 placed at his disposal for the purchase of seed.

Mr. W. T. Dennis has been commissioned to visit every State in the Union, report upon its grasses, and procure seed for distribution. when seed has been procured, experiments will be instituted with a view of ascertaining what grasses are most permanent, most prolific, and most nutritious for stock, in every district or county in the Union.

Dr. O. T. Jackson, is permanently engaged in chemical experiments of considerable value. By one set of experiments, Dr. Jackson has proved that oil, worth about seventy-five cents per gallon, can be extracted from cotton seed, leaving a cake worth two or three cents per pound.

Experiments of much promise are projected, among which are those by which the amount of phosphate in the worn out soils of the east, as compared with the virgin soils of the west, are to be determined.

These are some of the chief operations at present being carried on or projected by the Agricultural Bureau, under the direction of Dr. D. J. Brown. They certainly promise important results to the agricultural fraternity.

THE WEATHER AND ITS SIGNS.

There is no subject of more importance, and yet there is none with which men of science, and others, are so superficially acquainted, as that indicated in the above caption.

The heat of summer and the cold of winter, the rain and the snow, the thunder and the lightening, the hurricane and the gentle breeze,—how many mingled associations of pleasure and grief are connected with these. Our enjoyments, yea, our very existence, it may be said, are dependent upon these operations of nature, which we call *the weather*.

Sometimes, as in 1854, the clouds will refuse their refreshing showers for a long period, and over extensive tracts of country the grass withers, and the lowing kine perish for want of the water brooks, and then famine comes and desolates many once happy homes. Sometimes, again, the clouds will pour down their torrents for long periods, and the floods will come and sweep resistless over broad lands, carrying the crops of the farmer from his fields, and his flocks from the vales. Again, the hurricane will sometimes come on swift wings, bearing destruction in its pathway; and if accompanied with red bolts of lightning, may consume well filled barns and store houses, and level many beautiful dwellings to ashes. Were those weather changes governed by immutable laws, and were we well acquainted with these, we might adopt special means to meet special ends, and provide against the coming drouth, the floods, and the hurricane. Hitherto, the weather has been considered fickle as the human temper, and if it is governed by fixed laws, the whole world lieth nearly in gross darkness respecting them. The sky may be cloudless to-day, and to-morrow, yea, in a few hours, the lightning and the tempest may come, and no man living can predict the event with certainty.

The astronomer has watched the motions of the distant planets, has weighed them in a balance, and can tell the exact period when the moon, after a long interval, will hide the sun's rays from the earth by day; and also when the excentric comet, after long journeys in unseen regions of space, will revisit our system again, but he cannot positively tell the particular atmospheric changes that will occur to-morrow in the city where he dwells; and yet a correct knowledge of coming atmospheric changes would be most useful to all men.

Can such information ever be obtained? Not unless such phenomena are governed by fixed laws. Well, when we consider that the planets roll, and the tides flow by immutable decrees, can any person doubt that the weather is governed by fixed law? That such laws do exist, no one in his senses can doubt, and that they will yet be discovered, we have as little doubt, and it is a shame that so little has been done to discover them. We are glad, however, that something has been done, and there is a promise of more. Various stations have lately been established in our own country for taking meteorological observations, and all the leading nations of Europe have also entered upon the same course of investigations. Such observations extending over various parts of the globe, and for a number of years continuously, will no doubt lead to astonishing results. Already by private enterprise and keen observation, Prof. Espy and Mr. W. C. Redfield, of this city, have made valuable discoveries relating to gales, and for navigators, regarding the rotary progressive course of tornadoes, which have proven to be of great benefit, by teaching seamen how to withdraw from their power. The spots observed on the sun's disk take place at regular intervals, and these, Sir Wm. Hershel asserts, affects the weather on our globe to such a degree, as to regulate the very price of wheat. Lieut. Maury has done much to reduce the weather changes on the ocean to a science. It is believed by Humbolt and other eminent Philosophers, that the sun is the source of magnetism as

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well as heat, and the vibrations of the magnet are to our globe, as the beating of the pulse to the human system.

In an article in the last number of the "North British Review," believed to be written by Sir David Brewster, he says, "Had Hipparchus and Ptolemy made their observations, and had they also been made by their contemporaries and successors in different parts of the world, we might now be predicting the weather with as much certainty as we do the planetary motions." The great number of meteorological observations now being made in various parts of the world, inspire us with a hope that such a result will yet be accomplished. We hail every effort that is made to reduce "the weather and its changes" to a positive science, because as we have already stated, such knowledge will be most useful and important to all men. [Scientific American.

HEALTH FOR CHILDREN.

There are as many children die in cities as in the country, and half the children born do not reach ten years. Such a result could never have been intended by the wise and kind Maker of us all. A different result must be brought about by the exercise of the reason which is implanted in all parents, and which, if properly cultivated and practised in the light of our time, would soon work a wonderful change in infantile mortality.

1. Children should sleep in separate beds, on mattresses of straw, or shucks of corn.

2. Require them to go to bed at a regular early hour, and let them have the fullest amount of sleep they can take, allowing them in no case to be waked up.

3. Except a rug beside the bed, there should be no carpet on the floor of their chamber, no bed or window curtains, no clothing of any description hanging about, no furniture beyond a dressing table and a few chairs, no standing fluids except a glass of water, and nothing at all in the way of food, or plants, or flowers. In short, a chamber should be the cleanest, dryest, coolest, lightest and most barren room in the house, in order to secure the utmost purity of air possible.

4. Make it your study to keep your children out of doors every hour possible, from breakfast until sundown, for every five minutes so spent in joyous play increases the probability of a healthful old age.

5. Let them eat at regular hours, and nothing between meals; eating thus, never stint them; let them partake of plain substantial food, until fully satisfied. Multitudes of children are starved into dyspepsia. The last meal of the day should be at least two hours before retiring.

6. Dress children warmly, woollen flannel next their persons during the whole year By every consideration, protect the extremities well. It is an ignorant barbarism which allows a child to have bare arms, and legs and feet, even in summer. The circulation should be invited to the extremities; warmth does that; cold repels it. It is at the hands and feet we begin to die. Those who have cold hands and feet are never well. *Plenty of warmth, plenty of substantial food and ripe fruits, plenty of sleep, and plenty of joyous out-door exercise, would save millions of children annually.*

[Halls' N. Y. Journal of Health.

GAIT AN INDICATION OF CHARACTER.

Observing people move slow—their heads move alternately from side to side, while they occasionally stop and turn round. Careful persons lift their feet high and place them down flat and firm. Sometimes they stoop down, pick up some little obstruction, and place it quietly by the side of the way. Calculating persons generally walk with their hands in their pockets, and their heads slightly inclined. Modest persons generally step softly for fear of being observed. Timid persons often step off from the sidewalk on meeting another, and always go round a stone instead of stepping over it. Wide awake persons "toe out," and have a long swing with their arms, while their hands shake about miscellaneously. Careless persons are forever stubbing their toes. Lazy persons scrape about loosely with their heels, and are first on one side of the walk and then on the other. Very strong minded persons have their toes directly in front of them, and have a kind of stamp movement. Unstable persons walk fast and slow by turns. Venturous persons try all roads, frequently climb fences, instead of going thro' the gate, and never let down a bar. One-idea persons are very selfish, and "toe in." Cross persons are apt to hit their knees together. Good-natured persons snap their thumb and finger every few steps. Fun-loving persons have a kind of jig movement. Absent minded persons often take the wrong road, and sometimes find themselves up to their knees in a mud puddle, although the sidewalks are excellent. Dignified men move slow and erect. Fast persons cut across the corner, kick every dog they meet, knock down little children, run against the ladies, and hit every twelfth man's ribs with their elbows. Very neat men occasionally stop to wipe the dust from their boots—their hands hang by their sides. Very polite persons are sometimes seen bowing in their course to black servant girls and black stumps. [Selected.

Bowing ceremonies, formal compliments and stiff civilities, do not pass for politeness.

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DURHAM BULL, "DON," 12,707.

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STOCK REGISTER.

DURHAM BULL, "DON."

Don (12,707) is described in Vol. 11 of the English Herd Book as calved 31st of July 1852, and white in color. The opposite illustration gives a very accurate idea of his appearance. His sire was "The Lord of Eryholme," (12,205,) whose portrait is in Vol. 10 of the English Herd Book, roan in color, bred by A. L. Maynard, Marton-le-Moor, Ripon, in England.

His dam was Apricot, described in Vol. 11 of the English Herd Book as roan in color, and bred by T. Bell of Kirklivington in England, and got by Third Duke of York (10.166.) Annie by the Fourth Duke of Northumberland, (3,649.) Anna by Short Tail, (2,621.) Acomb by Belvedere, (1,706,) &c., &c.

Don is also described in Vol. II of the American Herd Book, was bred by Noel J. Becar and purchased by Hon. John Wentworth for the Illinois Breeding Association, at Summit, Cook Co., Illinois. See advertisement of Sargent Cook.

WINTER CARE OF ANIMALS—HORSES.

We advert to this subject thus early for the reasons that, many spare moments may be at the disposal of the farmer ere the snows and frosts of winter come upon us, and because the habitations of domestic animals should be fully and comfortably prepared for their reception long ere necessity compels them and us to seek a shelter.

The first requirement in the winter care of horses is a good stable. The choice of situation, and there is a choice, is an important item. A high and dry spot, or one that will admit of drainage, is as necessary for this purpose as for the house of the farmer. Stables should be dry. Damp stables are productive of as many evils as damp houses,—in fact many of the most violent diseases to which the horse is subject are often attributable to this one defect. Shelter from cold and bleak winds is another desideratum which should receive attention. Stables should also be easy of access—here, however, the farmer consults his own comfort, and on this point it is unnecessary to dilate.

The second necessity is that the stable should be of good size. Not unfrequently horses are crowded into space so small as to be not only extremely uncomfortable for them, but highly injurous to their health. Stables thus crowded undergo sudden and remarkable transitions of temperature—the air becomes so heated that the animals are almost constantly in prespiration, and on being taken out to perform work are immediately chilled; and colds and coughs soon produce their ultimate and inevitable results.

Another want, and a very great one, is windows. Dark stables are undoubtedly injurious,—if they were not, the necessity that will at times arise for light to render aid to animals that may get cast or injured, periods when prompt and efficient action is needed, demand a reform in this respect.

Again, proper and thorough ventillation should, in the construction, be one of the prime objects sought. Man sees the necessity for a circulation of air in his house, where breathing is the only thing that destroys the purity of the atmosphere,—how much more necessary is it in the home of the horse, where the emanations from the surface of the body, the manure, and the urine, all mingle with it and taint it.

Having provided comfortable quarters, the duty of supplying them with a sufficient quantity of good food, and that at regular intervals, devolves upon the keeper. For many years experiments have been in progress with the purpose of ascertaining the kinds best adapted to the wants of the animal at this period of the year. Persons differ as to the relative value of many articles, yet all agree that variety is essential. Oats are not the only food that will fit a horse for labor or the road—roots are oftentimes much superior. Carrots are perhaps the first in this class, and are noted both for their action upon the internal organization and in an improved external appearance. A loose, mellow hide is observable in all animals where this root forms a portion of their food. In this connection it may be proper to say, that every barn should have a hay or straw cutter, and that the instrument should be kept in daily use. Every method by which the digestion can be improved, ought to be resorted to, for the stomach is the great furnisher of motive power, and should the steam go down, locomotion is impeded or brought to a full stop.

Regularity in feeding is a thing that must not be overlooked if we aim at dooing every thing in our power for our stock. Every farmer can recall in his own experience numerous times when he

> "Moodily has listened long
> To hear the dinner horn!"

and knows, however tired previous to the welcome sound, with what alacrity has been "laid down the shovel and the hoe," and the most direct course taken for the well spread board. Animals possess some humanity in their composition, and if it can be discovered nowhere else, it is readily

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found in the stomach. Once more we would repeat, feed and water regularly.

The cleanliness of the horse is indispensible to the preservation of his health. Stables with every appliance for comfort, food in abundance and of the very best description—if every want be supplied—without the animal and his quarters are cleaned daily and kept so, it is of no avail. In addition to enhancing external appearance, there is but little doubt that the friction caused in the process of cleaning is promotive of the well-being of the animal. The hair of the well cleaned horse is soft and oily, and consequently it better fits him to withstand the cold rains so frequent during witer and early spring. The annointing matter is conferred through the agency of the skin, and this secretory process is doubtless augmented by good grooming. In the horse that is seldom or never groomed the hair stands in all directions, is rough and harsh to the feel, and in addition he has a dull and sickly look. Sooner or later mange will manifest itself in an animal thus cared for, and the sympathy of the outer with the inner organization, will rapidly affect the entire system.

Each department of the animal economy ought to receive its due propartion of care and attention, and must, if we expect the entire system to be benefitted. Let carelessness infringe upon the wants, in any one particular, and the detriment of all will be the result. Temperance, purity of the atmosphere, quantity and quality of food, in fact everything that will redound to the animal comfort, is worthy of the closest scrutiny on the part of the owners of horses.

[Wool Grower.

ABOUT KEEPING DOGS.

We can conceive of special cases when it may be expedient to keep a dog. But why every third man in the community should have an ugly cur lying about his house, or following at his heels, is more than we can explain. Some farmers say that a dog is useful to drive off a neighbor's trespassing cattle and to protect their lambs and poultry. But good fences are better than dogs to keep off cattle, and lambs and poultry kept near the house will seldom be injured by strange dogs, Some of the best farmers of our acquaintance do not keep dogs, and have no trouble of this kind with their crops and their flocks.

Mechanics, doctors, lawyers, editors and all sorts of people keep dogs, sometimes, not because they are useful, but because they *like* dogs and will have them. Well, there's no disputing about tastes; and if any one wishes to keep a saucy cur, we have no power or desire to prevent his doing so. The *economy* of the thing is worth looking at. It often costs from six to eight dollars a year to feed a dog. We have seen it estimated that dogs in New England cost upwards of $1,033,040 annually. This money applied in aid of Common Schools we think would be much better used.

Then, as to the matter of *taste*, we must say a few words. Very few are so handsome that it is a pleasure to look at them. The majority are ungainly, dirty, sneaking, cross and ferocious-looking objects, which one hates to see and dreads to encounter. One of the strangest things in the world to us, is that any respectable man can wish to have one of these short-legged, big-bellied, snub-nosed, sore-eyed, cross, dirty things trotting along at his heels, as his chosen companion, and ready to snap at every man, woman or child he meets. We have noticed that some of the ugliest and meanest looking dogs are most beloved by their owners!

What a delightful thing a red-eyed, cross poodle is, in a woman's lap, especially when she informs you that this "love of a thing" shares her bed every night! How pleasant it is to see a troop of dogs following their masters into church on the Sabbath, and then to have them whine and yelp when their toes are trodden on; or to see them mount the pulpit stairs in sermon time, and, to close the scene, to have the sexton chase after them up and down the aisles to expel them with his cane, and thus destroy all the solemnity and interest of the service! What a pleasant thing it is to have a dog rush out upon you from a house as you ride past. It does your horse good to have him frightened in that way, and it does your own patience good to be irritated in that particular manner. Nothing can be more delightful than on visiting a neighbor, to have his dog attack you as you enter the premises, or growl upon you as you knock at his door. It is a very warm and agreeable welcome; it makes you think your neighbor an amiable and hospitable man, and makes you want to come again!

On the whole, the more we pursue this subject the more interested do we become in it. If we hear of any mad dogs running about the streets, we shall surely buy a cur of some sort; we desire to see several cases of hydrophobia. [Rural American.

GARGET IN COWS.—Garget is a troublesome complaint. It affects the udder, and produces a morbid action of the entire system, but more particularly of the secretory and latescent grands. If taken in time, common linseed oil rubbed carefully over the teats and udder, will effect a perfect cure. As a preventive, a few doses of saltpetre per month, administered in dough or mush, a tablespoonful at a time, is highly valuable.

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For the Farmer.

THE HORSE.

The horse in a state of nature, and even in his domesticated state, under good management, has a moderate and very delicate appetite, and is very nice in his choice of both food and water. But a horse by over-feeding has been known to acquire a voracious and depraved appetite, and eat from thirty to forty pounds of hay in a day, and drink four pails of water at a time—that is, from twelve to sixteen gallons. With such a load in his stomach and bowels, what can be expected but an abridgment of the animal's life and services to one-third of the period to which they might have been extended under proper management? And his labor during this short period is often interrupted by sickness. Besides this, we are to consider the loss of muscular power that must result from such immoderate feeding. Also the loss of spirit or energy, rendering a horse sluggish, sleepy, and unwilling to work The blood, too, gradually becomes impoverished and full of humors, as it is termed—the bowels loaded with worms, and the air passages with viscid or acrimonious mucus, causing wheezing and difficult breathing. The animal becomes mangy, farosed, greasy and consumptive. Many horses have been thrown down merely from the sluggishness and weakness occasioned by loaded bowels, and whenever the gripes, colic, or fret, terminates in inflammation of the bowels, and death as it often does, we are sure to find the stomach or bowels, or both, in a loaded state.

Again, the stomach is often injured, both as a muscular and as a nervous organ, by immoderate work, and by exposure to cold and wet, at a time when the strength of the body is exhausted by exertion, and the skin is in a perspiring state. Therefore, attention to feeding alone, is not sufficient to preserve the health of the stomach, except in respect to animals that are designed for food. And even thousands of such animals are lost from improper feeding, and consequent constipation of the lungs and other internal parts. The same may be observed of cattle, especially yearlings which are poorly kept during the winter, and put suddenly into rich pastures in the spring.

But, though the horse's stomach cannot be preserved in a state of health by attention to feeding alone, we have this consolation, that it is only by working him unfairly and cruelly that we injure the stomach when it is properly supplied with food; and by working a horse with moderation and treating him in every respect with kindness, we are not only doing our duty as Christians, but promoting our interests as horse proprietors. The state of the bowels has more to do with the digestive functions than is commonly supposed: not so much perhaps as in the human body, but in a sufficient degree to require attention.

In the usual way of feeding and treating horses, no attention is paid to the state of the stomach when they are put to work, but frequently they are put into a buggy or coach, or ridden off at a rapid rate, with their stomachs loaded with food. The consequence of this has often been gripes, inflammation of the bowels, and even sudden death. In the simple and economical mode of feeding, the horse is always ready for his work—digestion goes on rapidly, every particle of nutriment that is contained in the food is extracted by the stomach without any injurious exertion, and is converted into pure blood; but when the stomach is loaded, as in the other case, even with good food, digestion is always imperfect, and performed with difficulty, and when the hay is bad, as it often is, the consequence is still worse. The stomach, by such management, is sure to become, in time, more or less diseased, and when this happens, a foundation is laid for many diseases, such as broken wind, chronic cough, colic, worms, &c. J. S.

MILWAUKEE, Nov. 15, 1856.

KEEP MORE STOCK.

Stock growing is fast becoming popular among our most astute farmers. They begin to find, or rather to realize "in the light," as the Quakers say, the truth of the Scotch maxim, "No cattle no manure, no manure no corn." So long as our generous alluvial soils gave crops without stint, the farmer only set down the cost of feeding a pair of three year olds against the small sum for which he sold them; counting as nothing the manure they made, which alone prevented the deterioration of his soil. But all this is changed now: three year olds are sold at this time at more than fifty dollars a head, and such is their scarcity on the farm, that the soil is fast deteriorating, except

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among those thinking farmers who have bought as many lean kine as they have sold fat ones. These men have sold large crops of corn, and fed it all to their animals, thus realizing stall fed prices in their sales, over and above the grain in that extra nitrogenous manure made from corn fed cattle.

PUERPERAL, OR MILK FEVER IN COWS.

This disease appears to increase both in prevalence and fatality. A few years ago its occurrence was so rare, that it was not investigated, neither was it then so fatal. It is now so common on the Western Reserve, or Northern Ohio, that the dairy men begin to fear sad havoc amongst their cows. I will give my opinion of it:—

It is evident that all who keep cows have been striving for the best milkers, and *improving* for that purpose, and have so improved in quantity that it is now a common yield to get from twenty to thirty-five quarts a day. This enormous flow of milk overtaxes the system at a time when the animal is under the influence of reproductive excitement. And another reason is, it is of common occurrence to have a cow go from one to twenty days over the usual time. This is indicative of a high and plethoric condition of the system, which retards the maturing of the fœtus, and keeps back the development or flow of the milk which is necessary to the natural and easy parturition. Another reason is, it has become a general practice to stable cows up to the time of calving, and when turned out they are more liable to take cold by lying on the ground, and the hot sun likewise affects them, and thus they are liable to fever and inflamation, and the cows that are good milkers and give a great quantity, are more liable to a reabsorption of the milk. A flush of feed after parturition is apt to produce reabsorption of milk; much excitement and worrying about the calf is also apt to create fever.

The first symptom of puerperal fever is, the animal does not yield her milk readily; it will come slow, and the quantity is small. The nose or muzzle is dry; the eyes are dim; the ears droop; she hangs her head; moves with difficulty; moans, and lays down to rise no more. The first symptoms generally noticed, is the difficulty with which she rises, or inability to get up. The fever soon becomes general, or sympathetic. The sudden transfer of accumulated action, at or near the time of parturition, must cause a great constitutional liability to local inflamation. If an abcess form in the udder it should be speedily punctured, and this may occur before or after parturition; if before, the womb will not be likely to be the seat of inflamation, but the udder; or, a general fever will set in, which will hasten labor apins. The great difficulty exists in its not being detected in due time. A cow frequently is ailing, not ruminating as usual; the milk not given freely, and she, scarcely able to stand long enough to have it drawn. But in the hurry and bustle of milking, she is turned out unnoticed and unattended, when she should be milked from three to five times a day during her illness. A cow that comes to her milk before calving, should be milked regularly, and thus fever may be prevented.

Dairymen should be careful and watch their cows for one week before and one week after calving, which is always attended with more or less febril symptoms. The disease occurs more frequently in fat and well kept cows; their systems being more disposed to the ready yielding to the influence that generates the milk. I have always found those patients to have large and well filled udders before parturition. I have never known a poor milker, or one who gave poor milk, die of milk fever. I have never known but two recover after they were unable to rise without help. At this stage of the disease, the system becomes so inactive and dormant that medicine fails to produce a change of symptoms; and the febrile symptoms increase until convulsions supervene, which soon terminate in death.

I will not attempt to prescribe at this time, but only insist on a close attention to the symptoms, which undoubtedly exist two or three days; as simple fever, for example, which is easily treated, by giving cathartics and febrifuges, drawing the milk every three or four hours, under this plan of treatment, the animal will, in a few days, recover. A cow that does recover from a reabsorption of milk is seldom worth keeping, as she would be liable to have it again the next year. All such cows should be fatted immediately, and disposed of, and thus avoid the risk next season.

[Pierce, in Veterinary Journal.

MURRAIN.—In consequence of the extension of the murrain among cattle in Poland, a sanitary committee of twelve members, one of whom is a veterinary surgeon of eminence, has been appointed to each of the five governments. They are ordered to adopt the most active measures to investigate causes, and to apply remedies.

[Daily Press.

THE temperature of the valley of Sacramento, California, during the day in summer, ranges from 102° to 120°, Fah., in the shade. Pretty hot for such a Paradise as it is represented to be!

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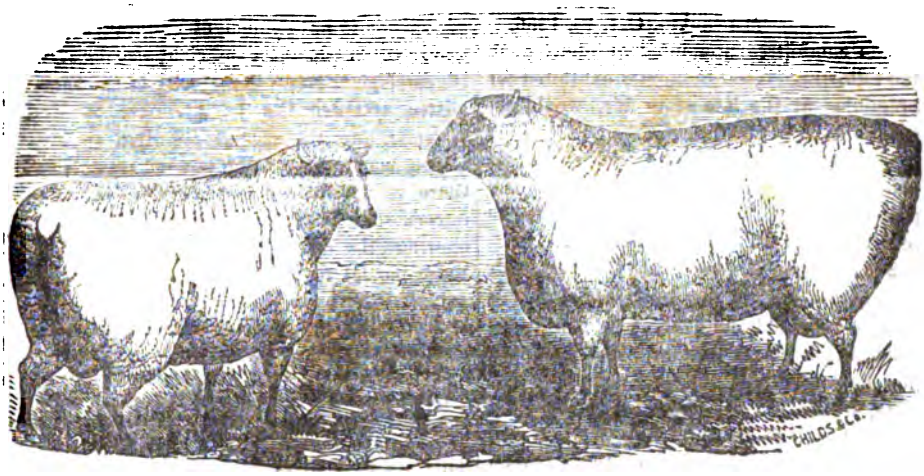

TWO SOUTH DOWN BUCK LAMBS.

The above cut represents the portraits of two South Down buck lambs, raised by the Illinois Breeding Association, Summit, Cook Co., Illinois, from their imported buck "Bunker Hill" and imported ewes. There are still a few full blood yearling rams, and a few ram lambs for sale out of this buck and imported ewes. Address S. Cook, care of Hon. John Wentworth of Chicago, Illinois. See advertisement of Sargent Cook.

REGULARITY IN FEEDING SHEEP.

If there is one rule which may be considered more imperative than any other in sheep husbandry, it is that the utmost regularity be preserved in feeding. First, there should be regularity as to the *times* of feeding. However abundantly provided for, when a flock is foddered sometimes at one hour and sometimes at another—sometimes three times a day and sometimes twice—some days grain and some days none—*they cannot be made to thrive.* They will do far better on inferior keep, if fed with strict regularity. In a climate where they require hay three times a day, the best times for feeding are about sunrise in the morning, at noon, and an hour before dark at night. Unlike cattle and horses, sheep do not eat well in the dark, and therefore they should have time to consume their feed before night sets in. Noon is the common time for feeding grain or roots, and is the best time if but two fodderings of hay are given. If the sheep receive hay three times, it is not a matter of much importance with which feeding the grain is given, only that the practice be uniform.

It is also highly essential that there be regularity preserved in the *amount* fed. The consumption of hay will, it is true, depend much upon the weather. The keener the cold, the more sheep will eat. In many places a light daily foddering would suffice; in others a light foddering placed in the depository racks once in two days would answer the purpose. In the South much would depend upon the amount of grass obtained. In the steady cold weather of the North, the shepherd readily learns to determine about how much hay will be consumed before the next foddering time. And this is the amount which should, as near as may be, be *regularly* fed. In feeding grain or roots there is no difficulty in preserving entire regularity, and it is vastly more important than in feeding hay. Of the latter a sheep will not over eat and surfeit itself. Of the former it will. And if not fed grain to the point of surfeiting, but still over-plenteously, it will expect a like amount at the next feeding, and failing to receive it, will pine for it and manifest uneasiness. The effect of such irregularity on the stomach and system of *any* animal is bad—and the sheep suffers more from it than any other animal. The shepherd should be required to *measure* grain out to sheep in all instances. [Randall.

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REPORT OF THE COMMITTEE ON BLOOD HORSES.—OFFICIAL.

Milwaukee, Oct. 10, 1856.

The committee appointed to report upon the following classes of horses exhibited for premiums at the late state fair, would respectfully report as follows:

1st. Best blood stallions, four years old and over, having been kept for stock the past season in this state. The committee to require satisfactory proof of pedigree.

2nd. Morgan Horses. For the best stallion, kept for stock the past season in this state, 4 years old and over.

3d. Black Hawk Horses. The best stallion kept for stock the past season, in this state, 4 years old and over.

4th. Carriage Horses. For the best and second best pair matched carriage horses, also for the best and second best single horse; all to be exhibited in harness.

5th. Horses for all work. For the best and second best stallion for all work, kept for stock the past season, within this state, 4 years old and over.

Best and second best mares, 4 years old and over.

Best and second best pair of matched horses for all work.

The only horses among the first class (blood stallions) exhibited to your committee were two, one of which was an excellent six year old bay horse entered by E. H. Ball & Co. of East Troy. The other was exhibited by C. I. Bullock, Esq. of Sauk City, and is 5 years old, bright bay, and in nearly all respects a good horse, being 16 hands high, with good limbs, fine action and style, but the committee feel compelled by their instructions to withhold from both of these horses premiums, for the reason that there was no satisfactory proof, that they were thorough bred horses, and there was nothing in their appearance to unerringly indicate it. In justice, however, we would say that they are both fine horses, and well calculated to improve our stock, as they possess the requisites of good carriage horses.

There were but two Morgan Horses exhibited—one by F. M. Wheeler, Esq. of Springvale, in Fond-du-Lac County; the other, by Horace Chase, Esq. of Milwaukee. Both of these horses, judging from their pedigree are probably as pure blood Morgans as can be found at this time—they are both small, being about 14 hands high, very closely formed, appear to have sufficient endurance and good action, but not a sufficient size for stylish carriage horses. A majority of the committee awarded the 1st premium to Mr. Wheeler, and the second premium to Mr. Chase, but in the opinion of your committee there is but little choice between the two horses. Mr. Wheeler's horse is a beautiful chestnut, the other a rich dark bay, and to those partial to Morgan horses, we would say, that there are no purer horses of that breed to be found, judging from the pedigree exhibited by the owners.

There was a very large exhibition of "Black Hawk" horses, some of which were splendid specimens of that stock—probably equal to any that have ever been produced. This is a peculiar race of horses. They are (with but few exceptions) of a dark chestnut or black color, rather undersized, being 15 hands high, and weighing about 1000 lbs. They are generally marked by good style and action; they are kind to handle and drive, have plenty of spirits, and though all have fair, but few are noted for remarkable speed. The following horses were among the best exhibited, "Bucephalus," by John Gale, of Merton, in Waukesha County. This is a black horse, 7 years old. Except in size, he is a perfect model of this breed. He can trot a mile in about 2m. 57sec. to harness. This horse has been as extensively patronized as any horse of the Black Hawk family in this state. We have seen his stock, consisting of colts between one and two years old, and generally have thought it was promising, and particularly so, where he has been bred with good mares. Mr T. Marshall of Oak Grove, in Dodge county, also exhibited a large and very excellent horse of the same stock. This horse has good action, fine proportions and style, plenty of length to his neck, and is the nearest to a proper size of any of this family of horses exhibited. We know nothing of his stock, but should judge, that his colts will prove good. Mr. S. Cotton, Esq. of Racine, exhibited a beautiful chestnut "Black Hawk." This is a splendid horse, and must prove a permanent benefit to that portion of our state, as such a horse cannot fail to be liberally patronised. He trotted at the State Fair in 1855, one mile, in the vicinity of 3 minutes, and moved in good style. Geo. Paddock, Esq., of Milwaukee exhibited a 4 year old (same breed) of great promise. He is a dark grey or black roan, of fair size. He has more style than is often found, even among that peculiar breed of horses, a very strongly formed animal, and when he ma-

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tures, will compare favorably with the best horses of this kind, in the state. D. S. Foote, of Merton, also exhibited a beautiful chestnut colt, four years old of the same family. He was brought before us too late to compete for the premium, but is certainly an excellent colt. He is a fast trotter, and is worthy of the attention of those who feel an interest in the improvement of our horses. C. A. Lewis, Esq., of Ottawa, also exhibited a good "Black Hawk" horse 6 years old, also a good trotter, and showing all the peculiarities of that stock of horses, and possessing style and action rarely to be seen.

The only 3 year old "Black Hawk," exhibited, was by Santel Whitman Esq. He is a very fine colt, well broke to harness, and a good trotter, with fine appearance and carriage. The display of "Black Hawks" was really splendid. The Committee awarded the first premium to John Gale, of Merton, and the second premium to T. Marshall, Esq., of Oak Grove. The 1st premium on 3 year olds was awarded to Santel Whitman, Esq., there being no competitors, and his colt well deserving this mark of approbation.

John C. Starkweather, Esq., of Milwaukee, exhibited a pair of bright bay geldings, under the class of carriage horses. They were awarded the 1st premium; they are perfectly matched in size, color and movement; they are both 16 1-2 hands high, and excel in nearly all the qualifications of carriage horses. They are very docile and fleet travelers, and make a splendid appearance. The 2nd premium on matched carriage horses, was awarded to C. M. Porter, Esq. of Milwaukee. These horses are deserving of something more than a passing notice. They are well matched in color, travel well together, carry themselves finely, and as a pair of matched carriage horses are seldom surpassed. Christopher M. Graw, of John's-town, Rock County, exhibited a very beautiful pair of matched carriage horses, 5 years old, bright bay color, fine size, and a superior pair of colts. H. D. Eighuce of Mt. Pleasant, Racine county, also exhibited a pair of finely formed carriage horses. They are light horses, but well formed, very fast trotters, and as a pair of roadsters, were the best team exhibited, but the committee decided against them as carriage horses, on account of size.

As matched horses of all work, A Shultz, of Watertown, exhibited a pair of five year old black colts, to which was awarded the 1st premium. Mr. Pliney M. Perkins of Bennington, was awarded the 2nd premium upon a pair of dun horses 6 years old, exhibited in the same class—these are both valuable teams either as roadsters or draught horses. The best pair of horses of all work were exhibited by Robt. Thir, of Vernon, in Waukesha county, but as they were awarded the first premium at the state fair in 1855, they were of course shut out of competition again.

John Frazer, of East Troy, exhibited a splendid gray mare of all work (the only one exhibited). The committee awarded Mr. Frazer the first premium without hesitation. This is probably one of the finest mares in the state. There were but two geldings over 4 years old exhibited, one was shown by Talmadge Stevens, Esq., of Beaver Dam, the other, by Enoch Chase, of Milwaukee. The first premium was awarded to Mr. Stevens, and the second premium to Mr. Chase. Mr. Stevens' horse, is a good roadster, but small, he is, however, a good pattern. The exhibition of stallions of all work was extensive, and probably a better lot of horses has never been seen together in this, or any other western state. The 1st premium was awarded to a bright bay stallion, "Young Eclipse," 9 years old, owned by Walter S. Gurner, Chicago, but which stood for mares the past season in Kenosha. This horse is full 16 hands high, with black main, tail and legs, and is a perfect horse in all respects—he is docile, has a large nostril, full eye, small and beautiful ears, long curved neck, high withers, deep shoulders, broad chest, short back, long hip, full stifle, fine and strong limbs, and is strong, active, and spirited, his noble pride seemed to disdain the earth as he trod upon it. When such horses can be obtained, every lover of good stock may well ask, "Why will our farmers breed from small inferior and ugly stock?" Every admirer of horses, knows that size is essential to style, beauty, strength and durability. Good size and style combined, as in this case, give all that is desirable in a horse. That this horse overshadowed every thing exhibited at the fair, as a stallion, none who saw him hesitate to say. He was awarded the first premium by common consent. The 2d premium was awarded to J. W. Rhodes, Esq., of Kenosha, on a four year old stallion of dark bay color, very large size, good style and action, and fully developed, although but a colt in age. This horse will, beyond doubt, prove a very valuable stock horse. Among the horses exhibited was a very dark bay or brown four year old colt, owned by Z. P. Hasbrook, of Rock county, which we would recommend to the citizens of that county as a very excellent horse. He is of the Tippo Sultan stock, and must prove of great service to the stock growers of Rock county, where he stands. R. S. Fish, of Lisbon, in Waukesha County, through a misunderstanding, entered an excellent Black Hawk among the stallions for all work, and therefore had no chance to compete for a premium. We say this as a matter of justice to Mr. Fish. The premiums

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on 3 year old stallions of all work were accorded as follows: 1st premium to W. G. Benedict of Madison, on a very fine black colt, and the 2d. premium to C. T. Wilcox, of Janesville, on a "St. Patrick's" colt of bay color and handsome appearance.

The best 3 year old stallion of all work, shown, is owned by A. J. Cole, Esq., of Waukesha county. He was sired by Niagara, a bright bay color, but he was not exhibited until after the premiums were awarded; otherwise he would have received the premium.

The first premium on 2 year old stallions of all work was awarded to James Hylish of Lisbon, in Waukesha county, on a splendid bay colt, and the second premium was awarded to J. P. Lapham, on a very good brown colt.

In awarding premiums, the committee have deemed it their duty to be entirely impartial, and have decided matters according to their best judgment. Many, of course, as in all competitions for excellence, must be disappointed. In several instances they found it very close work to decide between two horses, contending for the same prize, where the two were so nearly equal as to make it difficult in the extreme to decide between them. In those cases, a majority of the committee settled the question.

In concluding this report of our action upon this matter committed to us, we deem a few general observations not out of place.

The stock grower should raise good horses. At a trifle less expense, the use of a thorough bred stallion may be obtained. The subsequent expense of raising a colt of superior blood, of noble size, and the best appearance, is no greater than that of growing stock of inferior blood and quality. At the age of 4 or 5 years, a thorough bred colt is worth from $250 to $500 for sale—for use, he is kind docile and intelligent—has beauty, speed and bottom; for the road, the turf, or the field, is every way what men wish to have. He lives longer, will endure greater hardships, and is far more profitable. The horse of interior blood is difficult to break, is slow of motion, is easily injured by labor, is short lived, and after a few years of labor rapidly declines in usefulness and profit.

These considerations should be imperative in dictating the breeding of stock. It costs very little, if any, more to breed a blooded beast, and it is many times more valuable when bred. In any other channel of business, considerations and facts like these would conclusively decide the action of a man of good sense. In this alone, such facts seem unavailing with large classes of stock growers. They will still breed "plugs," scrubs, nags and ponies, of ill appearance and little value, when no more care and no more expense would produce them the noblest forms of this semi-human being—the paragon of domestic brutes.

There is scarcely a subject in the concerns and business pursuits of life, that is of greater interest or more importance than the improvement of the breeds of horses. The horse is the noblest animal that was ever reduced to human subjection. In the peaceful pursuits of agriculture, he is man's patient servant and drudge. When not subdued to the hardships of labor, he becomes almost an intelligent friend and companion. His instinct and courage have frequently saved his master from imminent danger. He is made an instrument of pleasure and recreation, at once gentle, lively, and secure. In war he snuffs the battle-tainted breeze from afar, and "His neck with thunder clothed and long-resounding pace," he rushes with almost human knowledge, and often with more than human daring, to where the fight rages the thickest, courting the danger that meets him, and mingling the terrible music of his voice with the noise and shock of the contending host. The favorite steeds of the greatest conquerors have come down to us borne on the same breath of fame.—The ancient mythology endowed him with wings and made him the means by which the poet was conveyed on the loftiest flights of his sublime muse. Pegasus, the steed of the poetic muse, is handed down to us in the same legends that made Parnassus its chosen seat, and Helicon the sacred waters in which it bathed. So closely were the first civilized soldiers of Greece identified by fear and superstition with the coursers which they bestrode, that they were deemed the same terrific being, and the Centaur comes pictured to us, with the body of the horse, presenting in front a gigantic human head and breast. One of the most delightful examples of all-sacrificing patriotism—of self denial that laid down life itself on the altar of country, was that of Marcus Curtius, who rode his gallant steed into a prepared pile where they died together, in obedience to to the oracle which demanded his destruction as the price of his country's safety.—With the devotion that would not in death be separated from the friend and master of his life, the gallant steed needed neither whip nor spur—nothing but the guidance of the patriot's voice and rein—to plunge into certain destruction. The Hindoo widow, who immolates herself upon the burning pile that consumes the last remains of the man she loved, is scarcely more instructive with its lesson of rare and noble virtue than the horse of Marcus Curtius.

Caligula, in the wantonness of his tyranny and caprice, set up his favorite horse in the Roman Capitol, crowned him with his own imperial coronet, and demanded for him the same honors that were paid him-

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self. The voice of history proclaims that the noble steed was far more worthy of such homage than the cruel and bloody tyrant whom he served.

An authentic account is preserved of a terible shipwreck on the coast of Southern Africa, where a horse rushed repeatedly into the raging surf, which no human power could brave, and rescued many persons from the broken wreck and tempestuous sea.

It is related in the life of General Marion that a sergeant of his brigade owned a noble animal, in which hatred of a red coat vied with that cherished by the sternest patriot of the Revolution. The crimson badge of the oppressors of our fathers almost crazed him—as he saw them arrayed in ranks against him, he became frantic and bloodthirsty—he rushed among hem, trampled them beneath his feet, tore them with his teeth, and nothing but their total destruction would appease his terible wrath.

He whose labors tend to the improvement of this noble race, deserves well of the community as its benefactor. Your Committee trust that among the labors of the State Agricultural Society, that which is most highly prized and appreciated will be that which results in the bettering of the condition and quality of the horses of the State.

Respectfully submitted.

ANDREW PROUNFIT, Ch'n.

WINTERING COWS.

At a recent Farmers' Club meeting in New York, a member made the following suggestions in reference to the wintering of cows:

"If I were to have cows wintered just to my likeing, they should be fed on corn stalks, and if profit were consulted these, by all means, should first run through a stalk cutter. This in my estimation, is a saving of at least one-fourth their value. My method of feeding is to give each animal a bushel basket full of chopped stalks; they will not eat them clean, but to save all, I throw what they leave in the mangers to my colts, who soon dispose of them, and without a remainder. Those cows which are in milk, are fed a slop of buckwheat bran, night and morning; those not yet come in are given two or three ears of corn at each feeding until they begin to spring bag, when they are fed once a day, the same as the cows which are milked. In this way cows may be kept in a thriving condition, and I believe a greater yield of milk and butter can be obtained than from any other mode of feeding."

A PUNSTER at the point of death, being advised to eat a piece of pullet, declined, saying that he feared it might "*lay* on his stomach."

THE FIRST SNOW STORM.

BY MARY E. CAULKINS.

It is snowing—it is snowing!
See how white the ground is growing!
See how light the flakes are lying
Where the leaves of late were dying,
While the Autumn wind went sighing
O'er their melancholy bed.
Now a wintry sky is o'er us,
And the wind in fitful chorus
Breathes a requium for the dead.

On the willow, lately wreathing
To the Summer wind's low breathing,
On the locust and the vine,
On the leafless jessamine,
On lilac bare, and eglantine—
See the white flakes lightly fall—
As if to mind us of the hours
When verdure bright and fragrant flowers
Brought a happiness to all.

In the grave-yard it is snowing:
Drear and chill the winds are blowing
Through the branches long and bare
Of the willows weeping there,
O'er the loved ones and the fair,
Sleeping in their dreamless bed;
Sad the sky that now is o'er us
And the wind in mournful chorus,
Breathes a requium for the dead!

RAISING LOPPED HORNS.

A short time ago a correspondent inquired if there was any known method of raising lopped horns. We accidentally came upon the following communication in the Albany Cultivator, for 1852. The writer says: "The horns of steers can be raised without the least damage to their growth, (the most convenient time to do it is when they are kept in the stable) by taking two small pulleys; place one of them directly over the front edge of the manger, high enough to be out of the way of the horns—the other at any place you wish, so that the weight will hang out of the way; pass a cord through them with a loop at one end, to slip over a button on the end of the horn; at the other end attach a weight of from two to four pounds. This should be put on every night when the steers are in the stable, and taken off in the morning when turned out. I have never known this operation, when faithfully performed, to fail of raising one or both of the horns to any desired position, in from two to six weeks time. Our success has been such that we consider the lopping of one or both of the horns no serious objection, provided they are otherwise in good shape."

A STRICT temperance man, whose wife had fainted after having a broken arm set, went to the doctor, and in a slow and measured tone, asked him if on his conscience as a Christian physician it would be in any manner culpable when a lady fainted to hold the camphor bottle to her nose. "The deuce take your doubts, sir," said the doctor, in a rage, "in a case like this, one scruple of camphor is worth twenty scruples of conscience."

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HORTICULTURE.

The main employments of Horticulture at this season, are to protect tender articles from the severity of the weather, and all, from injury of every kind. It is a season of suspension in growth, or progress of any kind, till the opening of spring, hence, the only important thing is to pass this crisis in safety, and come out in good order for the new campaign; and to all those who are not already fully posted on the subject, we would say, that this is the season of all others, during the long leisure evenings of winter, to more carefully study the various subjects embraced under the head of Horticulture. If you have not a good treatise on practical gardening, buy it without delay. Fessenden's American Kitchen Gardener, costs only 50 cents, all the way from N. Y. postage and all. See C. M. Saxon, &c. advertisement, in the October number. Any man who don't already understand it, can learn $50 worth from it in a single year; for the reason that he can learn enough to enable him to have a good garden, which is easily worth the above mentioned sum to any family over and above all cost.

When the garden lesson is well understood, and taught and explained to the older children, then take up some good treatise on orchard planting and cultivation; Downing, Allen, Elliot, or almost any one you please. Begin it at the beginning, even the preface will not hurt you. Read it carefully, and dwell particularly on the more important parts. It will be found a useful study, and when spring comes, and it soon will, you will find it as much easier to go forward with those important pursuits, for the study you have given them, as to read and spell after learning how. Your winter evenings, spent in this way, will pay immensely better than when spent at some tobacco smoking country store, or bar room.

Those who cultivate house plants, need not be told how much pains taking and care is necessary, to keep them thrifty, and unfrost bitten, during our severe winters, and especially in common, open, cold houses. We have seldom seen house plants in families where there were young children, probably for the reason that the latter require so much attention as to leave little or none for the former. But when parents lack children, for pets, we think house plants are the next most appropriate article. Infinitely ahead of dirty lap dogs, which, by the way we consider the most disgusting appendage we ever yet saw to a lady; not even excepting a brainless, whiskered, moustached and Cologne scented dandy. Either are sickish enough, but of the two puppies, give us the latter. Plants should not be overwatered, as they are more likely to freeze, but should be enabled to catch every possible ray of sun shine, and as much fresh air, during right warm days, as possible.

Seeds with hard shells, and all sorts of stones, or pits of fruit, intended to be planted in the spring, should be slightly covered with moist, or even wet earth, in situations where they will freeze and thaw, once or twice during the winter.

Locust seed, however, do better to be scalded with hot water, before being planted.

Dahlias, to be wintered safely, should be packed in fine dry sand, and placed in the cellar, where they will not be over warm, nor where they can possibly chill to freezing. They are a tender article, and without such nice care, might just as well be thrown away at the outset.

Fruit trees should not be wrenched about by clothes lines, or otherwise, when frozen, it is very apt to crack and spoil them. Cattle rubbing against them is apt to injure and destroy them in like manner.

Cabbages may be kept fresh and green, all winter, by being buried in dry earth, heads down, or by being packed in casks, in shorts, or bran, or any thing else, to mainly exclude the air. The same with turnips and most other vegetables, when too much exposed to the air, and the light, they undergo rapid changes, and usually for the worse, for culi-

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nary purposes. A little attention to these matters would vastly pay the labor. Pumpkins even, may be kept all the winter, by being excluded from the air and moisture. The lovers of pumpkin pies, will find this last, an important matter. And last, though not least—who has gone into the raising of winter water melons? We have eaten them after the middle of December, that were decidedly good, although perhaps, lacking a little the fine flavor of early autumn ripening.

For the Farmer.

THE LAST WINTER'S EFFECTS ON ORCHARDS.

In conformity with the wish expressed in the October number of the Farmer, to hear from those that have lost fruit trees, during the past winter, I hasten to contribute my mite of experience. I concur with you as to the importance of setting out orchards of such kinds only as will suit the climate best, or perfect such fruit as will pay us for our labor; but, comparing the list of your correspondent "Duminor" with my own, I see that we have no safe criterion to go by, unless a majority of cases will warrant you in making up an opinion. But, in forming such an opinion, consideration should be given to the fact, whether the trees were obtained in eastern or western nurseries. Your correspondent does not state this. My trees were obtained from Rochester, N. Y. and set out three years ago last spring.

My injured trees, of which some appeared hopeless cases, are all doing well, owing to the severe pruning they received, most of them were headed down to within three feet of the ground. I have seen hundreds of trees in this neighborhood that might have been saved by a timely and severe application of the knife and saw, but, which were permitted to push forth leaves more than they could support, and thus wither and die inch by inch. Here is a comparison:

Duminor's Orchard.	*My Own.*
3 early sm. boughs, all killed	1 injured. 2 dead
3 engl. Russett, all killed.	2 uninjured.
4 tall Sweetings, all injured.	2 uninjured.
3 Seek-no-furthers, "	1 dead, 1 uninjured,
1 Northern Spy, uninjured,	1 injured, 1 transpl., uninj.
1 Yellow Bellefleur, "	2 uninjured.
F'l. Pippin. R. I. Greening, Baldwin. Esopus, Spitzenberg. badly damaged.	3 fall Pippins uninjured, 1 do. dead, R. I. Greening, uninj. 1 Baldwin dead, 1 uninj. 2 Esopus Spitz, badly inj.

Besides these, I have red Astrachan, Maiden Blush, Gravenstein, Winesap, Borsdorfer, Keswick Codlin, Hubbardson Nonesuch, Fameuse, one injured. Early Strawberry, one injured. Porter, uninjured. One Canada Reinette, and one Porter, doubtful, although yet alive, but the bark is cracked and blackened. Of pears and Quince, I have the Belle Lucrative, a splendid grower, quite unharmed, the wh. Doyenne, badly injured. Bartlett, Duchess d'Angonleme, Louise Bonne de Jersey, and Eastern Beurre—all dead. Of Cherries,—the black Tartarian, yellow Spanish, Napoleon Bigareau, Burr's Seedling, are dead. Knight early black is the only survivor.

And now, in conclusion, permit me to ask for some information. I am raising a bull calf, but having read so much of persons being gored to death by bulls, when infuriated, I am undecided what course to pursue, whether gentleness or severe treatment be most efficacious in subduing them. Would it be too cruel to chain the animal by the nose ring to the post, when he became unruly?

Another question: what is the name of the bug I enclose? I find them in the spring, on my apple trees—sometimes a dozen of them on a single tree, but this is the first one I have found, as late as October.

Respectfully yours, A. H. Kummel.

Sharon, Wis., Oct. 14, 1856.

As to the best mode of training Bulls, we should be governed by circumstances. Some are naturally mild and gentle, others, wild and savage. But one of the patent rings, or snaps for the nostril, is necessary for all bulls. The halter from the horns can be passed through it when special care is necessary, or the snap can be taken out of the nose in an instant.

These snaps cost but a trifle, and can be found at any good hardware, or agricultural store, advertised in the farmer.

We will be able to tell you all about the name, genus, and habits of the enclosed bug, in the January number. EDS.

THE passions are the winds which urge our vessel forward, and reason is the pilot which steers it. The vessel could not advance without the winds, and without the pilot it would be lost.

DECEIT soon becomes the torture of him who gives it a place in his heart.

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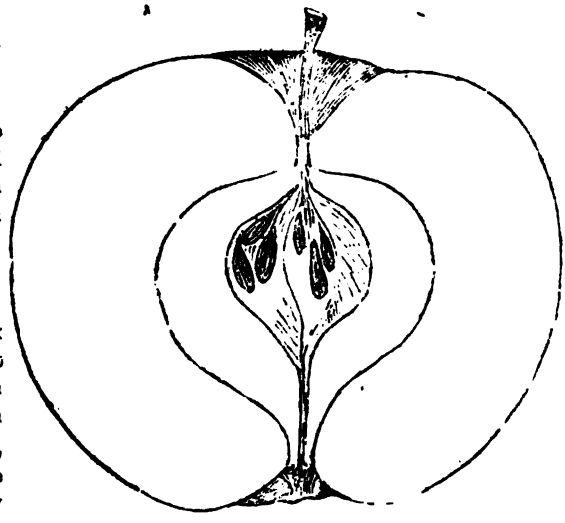
WESTERN BEAUTY.



The cut here given represents the "Western Beauty," raised from the seed by Mr. Geo. Branch, of Pewaukee Lake. We have received other fine specimens from him which will be given in the January number.

DESCRIPTION.

Medium or large in size roundish ovate shape; apex narrow, striped with bright red, on white yellowish ground—a nearly uniform shade of fine red to the sun, faintly clouded with white over the red; cavity slightly russity; stem three-quarters of an inch long, set in a small cavity; calyx and basin small; flesh white, tender, juicy, with a fine sub-acid and agreeable rich flavor. Prime, from late autumn until spring. Tree an upright and handsome grower.

For the Farmer.

HARDY VARIETIES OF APPLE TREES.

Messrs. Editors—According to your wishes, expressed in the October number, I herewith send you a few answers to some suggestions, which I have observed and experienced during the past season, on fruit trees, &c., and if you think them of any service to your readers, you can insert them.

"Duminor" of Rubicon, suggests to fruit growers to name the different kinds of apple trees that have suffered the least the past season and winter. By this I don't think we can come to any safe conclusion. I find that it is almost as much in the location and treatment of an orchard as it is in the varieties—with a few exceptions. Orchards that have been highly cultivated, and been mostly exposed to the north and northwest winds, and are grafted fruit, have suffered most—while others exposed to the east and southeast winds have mostly escaped, no matter what varieties they were.

There is also another exception, and that is that there is a difference between root and top grafts. Top grafts and seedlings have not suffered as much as root grafts, although exposed to the same extent; and seedlings have borne full crops of fruit this season, while grafted fruit has been almost an entire failure, with the exceptions of a few sheltered situations. As I am somewhat acquainted with differently located orchards in this neighborhood, I will mention a few sorts that mostly failed here: Baldwin, (top and root grafted.) Roxbury Russet, ditto; Esopus Spitzenburg, (in exposed places;) R. I. Greening, (in exposed places and root grafted;) Early Bough, ditto; Fall Sweeting, ditto; Black Gill-flower, ditto, &c. As no one can come to a just conclusion without knowing the situation and also whether the land is rich, or much cultivated, I will mention a few orchards that have been planted eight or ten years. My own, planted nine years ago, with some twenty leading varieties of both grafted fruit and seedlings, is situated with a small hill upon the south, and descending to the north and west, exposed partly to the northwest winds that pass down Pewaukee Lake, some seven miles, and only broken by the rail fence which encloses it. I lost two varieties—Roxbury Russet and Baldwin. All my other sorts have recovered. At my neighbor's, (T. L. Clark's,) one-half mile west, on very high ground, subject to the same exposure, from an orchard of 100 trees, mostly seedlings, only one died, and that from the effects of the borer. Mine and this orchard were cultivated with hoed crops. One still further west, at Osage Branch, with 100

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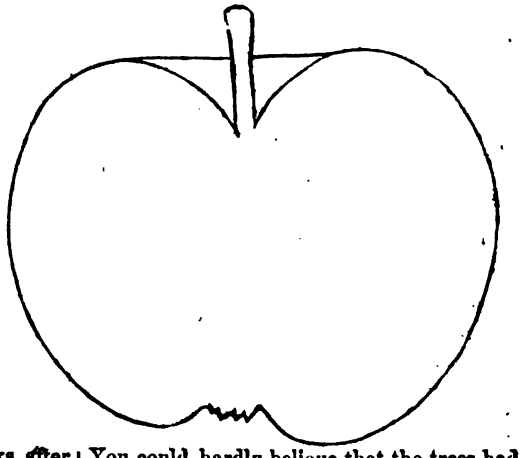
trees, 70 of which are seedlings and 30 grafts 8 of the grafts were killed, 10 badly injured. Seedlings on the same exposure not hurt. So it seems that no perfect calculation can be made by observing these results, though sometimes safe conclusions may be arrived at. I might cite other examples if it were necessary. G. P. P.

PEWAUKEE, Wis., Nov. 15, '56.



BEVAN'S FAVORITE.

This fruit, of which the outlines are here given, is very handsome and excellent; ripe last of August, and with care may be kept in good eating condition two or three weeks after gathering. Rather above the medium size, roundish, flattened, slightly conical. Broad brilliant red stripes on yellow ground. Flesh firm; of an agreeable sub-acid flavor, becoming nearly sweet when over ripe. Tree, fair upright grower and endured the past winter uninjured. A. G. HANFORD.

FRUIT GROWING IN THE PACIFIC. BIG STORY:

Extract from Col. Wilder's Address, before the American Pomological Society, at Rochester.

"By the reports from individual fruit-growers, and from associations, it appears that some varieties of the pear succeed equally well in the extreme south part of our Union, as well as the north. A gentleman from Oregon territory, recently informed me, that settlers there, had already provided themselves with extensive orchards, and from which, they gather fruit of great size and excellence. He also makes a similar report in relation to Washington territory, and instances among others, an orchard of one hundred acres, which is now yielding a large annual income to its proprietor."

"Another communication from an officer of this society in California, assures me of the great progress in our cause in that state, and pledges a full report of its Horticultural Exhibition for our transactions. One of my neighbors who went to California in 1854, and now residing in Napa city, writes: 'Such is the rapid growth of vegetation in that district, that apple trees, from seed planted in the spring of 1853, and budded the same year, yielded fruit in the autumn of 1855.' He says, 'I wish you could take a look at our peach orchard, loaded with three to four thousand baskets of fruit. You could hardly believe that the trees had made all their growth, and were most of them raised from seed, since I came to California, Feb. 1, 1854. The crop from this orchard, is now (July 18, 1856.) going to market, and we expect will amount to between ten and twenty thousand dollars.' The proprietor of that crop has called on me within a few days, confirms these statements, and reports that the crops and prices fully realized all anticipations."

After alluding to many successful experiments in different countries, in producing new varieties, Col. Wilder makes this just remark:

"These are triumphs, worthy of the highest ambition, conquests which leave no wounds on the heart of memory, no stain on the wing of time. He who only adds one really valuable variety to our list of fruits, is a public benefactor. I had rather be the man who planted that umbrageous tree, from whose bending branches, future generations shall pluck the luscious fruit, when I am sleeping beneath the clods of the valley, than he who has conquered armies. I would prefer the honor of introducing the Baldwin apple, the Seckel pear, Hovey's Seedling strawberry, aye, or the Black Tartarian cherry from the Crimea, to the proudest victory which has been won upon that blood stained soil."

The following remarks on the importance of drainage are eminently worthy of attention:

"The importance of thorough draining, and perfect preparation of the soil, have not received the consideration they deserve; especially where its silicious character does not furnish a ready, natural conductor to superfluous moisture. Thorough draining lies at the foundation of all successful cultivation. In cold, wet, undrained ground, the disease of trees commences at the root.

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which absorbs injurious substances, and the tree ceases properly to elaborate its nutritious matter. Wherever there is an excess of water, and consequently, too low a temperature, and the soil is not properly drained and thoroughly worked, the vital energies of the plant are soon impaired, and its functions deranged."

YELLOW LOCUST—GRAFTING SEEDLING TREES.

MESSRS. EDITORS—In the March Number of the Farmer I find a letter from A. G. Hanford of Waukesha, by which he informs the readers of your paper that the Yellow Locust is the valuable kind, while the Black Locust is nearly worthless as timber. Now will friend Handford have the goodness to inform us through the Farmer how we may know the Yellow from the Black that we may procure the seed of it instead of comparatively worthless varieties. If so he will oblige a friend.

Will some one who knows from experience, please inform me through the Farmer which is the best way to engraft a young seedling apple orchard of one season's standing or shall it be left alone until it begins to bear. A. A. HUBBARD.

Springvale Oct. 3, 1856.

NEBRASKA CROPS.

Wheat has yielded very well, and farmers are highly gratified with the wheat raising in this new country thus far. Oats has turned out fifty to seventy-five bushels to the acre, and of very superior quality. Corn promises to bring from seventy-five to one-hundred bushels to the acre, on land which was in cultivation last year, and twenty-five to fifty on the sod. Potatoes—we dare not tell how many loads of this Irish luxury will be produced to the acre, suffice it to say that Nebraska will be the paradise of the O'Finnegans. The soil of this territory may be equalled—it never can be surpassed. here a poor man may grow rich as a tiller of the soil, while he would scarce eke out an existence as a farmer in the east.

[Omaha City News.

A WORD TO BOYS.—Boys, did you think that this great world, all its wealth and woe, with all its mines and mountains, its oceans, seas and rivers, steamboats and ships, railroads and steam printing presses, and magnetic telegraphs will soon be given over to the boys of the present age? Believe it, and look abroad upon the inheritance, and get ready to enter upon your duties. [Ex.

SHIPMENT DIRECT, FROM CHICAGO TO Liverpool, a new era dawning for Western Farmers.

"A great and original experiment has been successfully realized within the last few days, which cannot fail to have a considerable influence in the expansion of the trade between Great Britain and the Far West of America—an experiment, we do not hesitate to say, only inferior to the introduction of steam as a connecting link between Europe, and the New World. This experiment will save hereafter the transhipment of grain grown in the immense districts abutting on the great American lakes, by which there will be a large saving of expense, but, what is hardly of less importance, the article will be brought to the British market in a much higher state of perfection than it has hitherto been.

The Dean Richmond, a rakish-schooner, of 380 tons register, is now in the Liverpool docks; her length is 145 feet, beam 26 feet, depth of hold 12 feet. She draws 9 1-2 feet of water. This clipper schooner, has just concluded a most successful voyage across the Atlantic, bringing direct from the port of Chicago, on Lake Michigan, in the State of Illinois, without breaking bulk 400 tons of grain, which she has delivered from the ships side exactly as she received it. A direct voyage like this, which saves transhipment at Buffalo and New York must, it is clear, pour into England produce of the North-Western States of the Union by the way of the St. Lawrence at a price which cannot fail to add to the trade and wealth of both countries.

The rapid rise of Chicago, the port of departure of the Dean Richmond, is a significant proof of the teeming agricultural resources of that portion of the United States. In 1832 it contained only 250 inhabitants; it now contains 104,000. The shipment of grain from this place last year alone amounted to two millions and fourth of quarters—the largest which has ever been despatched from a single port in any part of the world; while the exports of pork were 77,000 barrels, and of beef, 56,000 barrels. The canals will not at present admit of the passage of larger vessels, but even as regards this feature the future is hopeful; for a moderate expenditure of capital would admit vessels of three times the tonnage of the Dean Richmond, and with the inducements thus offered there cannot be a doubt the improvment will be made.

In point of time and cheapness this new route, brought into play, will compete very successfully with the New York or the Black Sea routes, by both of which large quantities of grain and flour reach this country. The Dean Richmond, we are informed by her owner, has made the entire passage in

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sixty days, which includes 1,500 miles of inland water; but she had a detention in the St. Lawrence, which is not likely to occur again. The canal and ship dues are most moderate, while there are no port, light or pilotage dues on the inland seas of America.

The number of hands through which the goods pass in the interior transit to New York, for transhipment across the Atlantic, adds largely to the cost of freight and commission, and to the manifest deterioration of the goods items of expenditure which will be avoided by the direct course which the Dean Richmond has traversed. The great commercial results which cannot fail to flow from this novel experiment, have made the Dean Richmond an object of considerable interest in the port of Liverpool; but the time is not distant when this novelty will cease; for the class of vessels which will rush into the trade are exactly those which can be cheaply and readily supplied."

Let us hope that the time is not far distant when trips direct, will be made to a large extent not only of our products to them, but of theirs to us. At present, the western farmer pay so many and such large profits to sharpers, shippers, and middle men, that he has nothing left for himself. The extravagant wealth that is building so many fine palaces in New York, Philadelphia, and Boston, rightfully belongs, in part at least, to the toiling millions of the great west. May the day be hastened when they will be enabled to enjoy a larger and more just reward for their labor. EDS.

GOOD LANDS IN NORTHWESTERN WIS.

The Stevens Point Pinery of the 24th inst., upon the authority of experienced woodsmen, thus describes some of the yet unsettled and undeveloped potions of our State, lying between the Wisconsn and Misissippi Rivers:

"The most experienced woodsman in Wisconsin, says Clarke county contains more first-rate land than any county in the State. It is 56 miles west of this velliage:—a good road is now opened from Stevens Point to the County Seat. Another will be opened in a few days from the villiage of Eauplaine, 12 miles above this, to Town 16 Range 2 west, in the same county.

"The county N. W. of Stevens Point, stretching across the head waters of Black and Chippeway Rivers, is the finest in Wisconsin.—Those who have travelled over it (and they are maney) represent it as alternating in ridges and intervals—most beautifully waterd with limpid, crystal brooks, a deep loam soil, and timberd with Maple, Oak, Bass and Butternut—the latter in great abundance. As yet but little of it is bought—but it will not remain long.—Settlers should redeem the time, and select their farms in this beautiful, healthy region without delay. It will be the garden of the State."

The La Crosse Road, from Portge to St. Croix, through the Land Grant District, will cross this fine region of country and speedily open it to settlement and cultivation. There will be a rush of immigration thither early next season. It would be difficult to find, anywhere, a more healthful, more fertile, or more attractive country.

[Mil. Sentinel

AGRICULTURAL STATISTICS.

The following valuable statistics, which we take from Hunt's Merchants' Magazine, give the nearest attainable approximation to the number of acres cultivated in each crop:

Land actually Cultivated in the several Crops of the United States, in 1849—'50.

Products.	Acres.
Indian Corn	31.0 0 000
Meadow or pasture, exclusive of hay crop,	20.000.000
Hay	13 0 0.000
Wheat	11.000.000
Oats	7,5 0 000
Cotton	5.000.000
Rye	1,200.000
Peas and Beans	1.000.000
Irish Potatoes	1 000.000
Sweet Potatoes	750.000
Buckwheat	6 0 000
Tobacco	400,000
Sugar	400,000
Barley	3 0 000
Rice	175,000
Hemp	110,000
Flax	100,000
Orchards	500.000
Gardens	500.000
Vineyards	250,000
Other Products	1,000.000
Improved but not in actual cultivation	17 247 000
Total improved lands	113,082,614

PRICES OF WHEAT IN ENGLAND.

By the official return of prices in the grain markets of England, for the week ending Sept. 20, it appears that the average price of wheat for the six weeks was 69s. 7d. 6d. What is important to observe is, that on the 6th of Sept. the price advanced, in consequence of the alarm occasioned by a few days of unpromising weather, to 72s. 2d., and on the 20th, the date of the last return, it had fallen to 64s. 5d. Since this last date, to the 3d inst., the changes in the markets of the kingdom had been inconsiderable. It is to be borne in mind that the above prices per quarter are based on a weight of 480 pounds, or 8 bushels at 60 pounds. In the quotation of the prices of wheat in the Liverpool and other British markets, the bushel is taken at a weight of 72 pounds.

It appears to be an established fact, that both England and France are considerably short of an adequate supply of breadstuffs. Their own journals estimate the deficiency

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in both countries, at not less than 50,000,000 bushels. That such a defect, must after a while operate favorably upon the prices of our produce, and somewhat raise it up from the present low ebb, seems to us almost certain. That prices here in Wisconsin are remarkably depressed, by various causes, seems quite certain. Among the causes, the high prices, in many instances, of inland railroad freight, and the uniformly high rates on the lakes, coupled with the stringent and cramped condition of the currency of the State, are the most prominent.

We shall look for better prices next Spring, and unless there is a material improvement on the present low rates (50 and 60 cents for wheat at Madison,) we shall hold on, even though we do thereby feed some rats during the winter. We had much rather feed four-legged rats, whose legitimate and natural business it is to steal, than certain two-legged scamps, who delight in plundering farmers out of their hard earnings. Others need not follow our example, unless they deem it wise. EDS.

SIXTEENTH ANNUAL FAIR, of the New York State Agricultural Society.

This society has just closed its Sixteenth Annual Fair, and the exhibition taken as a whole, has probably never been excelled; some of the departments were decidedly in advance of any previous exhibition. The arrangements were satisfactory; the grounds admirably adapted to the purpose. The weather on the day previous, and the first two days of the exhibition, was the most unfavorable ever experienced at any exhibition of the society, and prevented thousands from being present, who would otherwise have gladly attended. From Canada alone, we were assured by the President of the Agricultural association of Canada West, that 10,000 visitors probably were prevented from attending. The two last days of the fair were pleasant, and the farmers, with their wives and daughters, from the counties accessible, thronged the grounds. The numbers on Thursday were estimated at 20,000, and above the same number on Friday; and had the weather been favorable the four days, it is confidently believed that at least 50,000 people would have been present.

The arrangements made by the local committee at Watertown were the best ever had for our State Fair, and enabled the exhibitors, notwithstanding the very stormy weather, to preserve their articles uninjured.

The good order upon the show grounds and the arrangements of the Executive Committee, were carried out most satisfactorily by Major M. R. Patrick, General Superintendent, and his assistants.

A fine exhibition of dairy produce was expected from this excellent dairy district, but it far exceeded the expectations of the most sanguine. St. Lawrence county has for the first time appeared as a competitor, and has been crowned with the most triumphant success.

The ten cheeses exhibited by Nelson Fry, of Governeur, St. Lawrence county, received the first prize of its class, and was pronounced by the judges as the best exhibition they had ever seen, for its evenness of quality and its superiority of manufacture.

The machinery department—steam engines and machines for farm use were in large numbers, and better adapted to the wants of the farmer than any ever exhibited in the state; but we have not time or space to particularize. The reports of the committees, when published, will show the value of these articles.

The receipts of the exhibition were upwards of $8,000, and had the weather been favorable, would doubtless have equalled those of last year.

The address by Hon. Mr. Jessup of Pennsylvania, was a very able one, and its publication will add to the reputation of its distinguished author.

[Jour. of State Agricultural Society.

PERPETUAL LIGHT.

A most curious and interesting discovery has just been made at Laugres, in France, which we have no doubt will cause a searching scientific inquiry as to the material and properties of the perpetual burning lamps, said to have been in use by the ancients.—Workmen were recently excavating for a foundation for a new building in a debris, evidently the remains of Gallo-Roman erection, when they came to the roof of an under ground sort of cave, which time had rendered almost of metallic hardness. An opening was, however, effected, when one of the workmen instantly exclaimed that there was light at the bottom of the cavern. The parties present entered when they found a bronzed sepulchral lamp of remarkable workmanship suspended from the roof by chains of the same metal. It was entirely filled with a combustible substance, which did not appear to have diminished, although the probability is the combustion has been going on for ages. This discovery will, we trust, throw some light on a question which has caused so many disputes among learned antiquaries, although it is stated that one was discovered at Viterbo, in 1850, from which, however, no fresh information was afforded on the subject.

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EDUCATIONAL.

LEARN EVERYTHING, BUT KNOW NOTHING.

It may be said emphatically, that this is an age when children learn everything, but know nothing. This is especially true of young girls. The fashionable seminaries for the education of the future wives and mothers of the republic, usually undertake, with the most self-complacent absurdity, to instruct their pupils in everything, from French to embroidery, from geology to music. A young lady in this age of progress is not considered to be making any advances at all in education, unless she is studying at one and the same time, the harp and piano, German and Italian, crotchet work and fashionable netting, drawing and dancing, the art of composition and the art of making a curtesy, physiology and painting, algebra and astronomy, with natural philosophy in all its branches and artificial manners in all their conventionalities. As a consequence, the rising generation of young females exhibits myriads of smatterers, but very few thoroughly educated women. The fair students almost invariably forget to-day what they were taught yesterday. Undertaking to learn too much, they end by learning nothing. Even what is acquired is held only superficially. And what is true of young girls is true of boys, though we are glad to say, not in so great a degree.

It is the fault of modern academies generally to attempt to teach too much. The popular notion, that the more studies a pupil has the better must be his education, is radically wrong! and yet instructors, who know better, in order to make their schools flourishing ones, truckle to this idea. But a good education depends, less on the number of branches studied, than on the thoroughness with which a few are mastered. Far be it from the Ledger to say that a child should remain in ignorance of geography, arithmetic, spelling, history, or other necessary branches. This is not what we mean. What we do mean is, that our children should be taught these fundamental studies thoroughly, before they are carried forward to others of less importance, or instructed in what are merely accomplishments. We maintain that the woman who writes and speaks her own language correctly, has a more finished education than she who cannot spell common English words, though she may jabber bad French. We assert that the boy who has mastered one thing thoroughly, whether it be the mathematics, the humanities, or the idioms and structure of his native tongue, stands a better chance to succeed in life, than he who can conjugate in a dozen languages, dead or living, and is therefore no proficient in either, or his own.

We once new an old lawyer, who, when a new student presented himself, put Blackstone into the young man's hands. "Read that for a year," he was accustomed to say, "and then I'll give you something else."—To spend a year over a single treatise, comprised in but four volumes, seemed, at first, a useless waste of time. The student, if a quick reader, had generally finished the book in a month. But the preceptor was invariably inexorable. "You think you know it—do you?" he would say sarcastically. "Well, what is the rule in Sheely's case?" Perhaps the youth had been fortunate enough to notice and remember the abstruse distinction taken on that famous trial. But, even if he had, the old lawyer was sure to trip him up, in five minutes, on something else. Back to Blackstone the student went, at last aware of his deficiencies, and read, and noted, and analyzed, for perhaps a couple of months more. Then he returned to the old story, that there was nothing left to be learned. But the thorough old common-law advocate soon caught him again. When Blackstone was finished at last, is was finished, as it were, for life. Every line almost was fixed for ever in the student's mind.—He could look back mentally over the four volumes, as a spectator gazes from a mountain-top over a wide champaign country spread beneath him, and map out the whole without a single omission or blunder. He had a life-long clue to the labyrinth.

The old lawyer's plan of teaching law is the only correct plan of teaching anything. Boys or girls, educated on a similarly thorough system, at least know what they are talking about, when they talk at all. They have acquired discipline of mind, and clear ideas with it. If they undertake to write, they write sensibly and correctly. If they converse, they speak to the point. If they are called, in the duties of life, to decide in some novel combination of circumstances, they think accurately, because they know immediately where to look for the keystone of the problem. The vast field of knowledge is no longer a labyrinth to them, for they hold the clue to it in a disciplined mind and a capacity to study properly. It is never dificult to recognize such persons, even in five minutes' conversation. They are distinguishable at a glance, from those imperfectly educated individuals of either sex, who, to use a simile of Lord Bolingbroke, rattle on as meaninglessly as alarm clocks that have been sprung prematurely.

[Philadelphia Ledger.

The same gale that nips the puny and degenerate, develops the courage and hardiness of the strong; and as in the physical, so is it with the moral being.

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A SHORT STORY,
WITH A PRETTY GOOD MORAL.

We must work. Many who have been fortunate in business and having early acquired wealth, have retired from the active pursuits of life, to find what they call ease, have found instead, an accumulation of cares and evil, real and imaginary, which they never supposed to be connected with a life of idleness. There, for instance, is our old friend Coffee, for many years one of the firm of Coffee, Rice & Co., wholesale grocers in South street. Coffee commenced business in early life, and being enterprising and energetic, and "as busy as a bee," the business prospered and the firm became widely known for their successful trading. After Coffee had been in business for about twenty years, he concluded that he would retire from active life and spend the rest of his days (he was only forty-five) in some secluded spot, where the fluctuations of the flour market, or the rise and fall of pork and molasses, would disturb his quiet soul no longer. He would not be an anchorite, no, not he. He loved good living and good society too well for that. He would build him a mansion in the country, far away from the noisy sounds and noisome smells of South street. He would provide ample accommodations for friends who might come to partake of his good cheer, and he would lead a pleasant easy life. Such were his plans. But alas, poor Coffee! while thou wast acquainted with all the ins and outs of trade, thou wast ignorant of thine own self.

The partnership was dissolved, the site for a house selected, and in due time, a splendid mansion was built. It was the most elegant mansion in all those parts. The honest rustics gazed with astonishment on the evidences of wealth it displayed, the country storekeeper congratulated himself upon the probable acquisition of a customer, the village doctor calculated on an additional patient, while the poor parson rejoiced in his heart that there was some probability of having his small salary increased by the liberality of a retired merchant. For the first months everything went on admirably. Coffee had enough to keep him at work in arranging matters around the new place, and getting everything in proper order for permanent use. But when all this was accomplished time hung heavily on his hands. There was nothing to keep him employed—for all the work on his place was done by hired hands, and as he was determined to be free from all care, he even employed a man as overseer over the whole. The sum total of Coffee's daily occupation was eating, drinking and sleeping, with a little reading and an occasional ride. It was not long before symptoms of dyspepsia and of gout appeared, and after suffering months of untold agony he left his splendid mansion for the "narrow house appointed for all living." Poor fellow! He died *because he had nothing else to do.*

Then there was his neighbor Lapstone, who tried hard to keep souls into the bodies of himself and wife and eight children, by daily plying his honest trade of shoemaking. Lapstone's humble house was almost under the shadow of the great mansion, and he often sighed, as he looked up from his leather seat and saw the rich Coffee whirl rapidly by in his splendid coach, and was as often tempted to break the tenth commandment, and wish himself away from his wax ends and his awls, and in possession of some of his neighbor's riches. True, Lapstone was in comfortable circumstance, though he was a poor man. He had a little garden patch where he could labor for an hour or two every day, and while providing for his table be preparing himself by out-door exercise for the in-door confinement of his trade. Then his wife was a perfect model of a woman, frugal and industrious, while the eight young Lapstones were hearty and robust, and some of them old enough to work in the shop. But Lapstone had fancied, as he saw the wealth and show of his neighbor, that it was a fine thing to be rich and to take the world easy. Therefore he had sighed when his neighbor rode lazily along in his carriage, while he sat for ten hours a day hammering sole-leather. But when at length he saw the funeral train which carried the rich idler to his long home, he came to the conclusion that *health is better than wealth, and contentment more to be desired than great riches.* And that's the moral of this story. [Select.

ANECDOTE OF AUDUBON.

Returning from Philadelphia, after an absence of several months, absorbed in the newly found delights of home, he failed to inquire the fate of a certain wooden box, which, before his departure he had entrusted to the care of a relative, with the strictest injunctions as to its safety. At last, on interrogation, this treasure was produced, the dearly prized deposit of all his drawings, more cherished than a casket of rarest jewels! It was opened, and what was Audubon's dismay to perceive the misfortune which had befallen it. A pair of Norway rats having taken possession and appropriated it, had reared there a whole party. A few gnawed bits of paper were the only remains of what a few months before had been a thousand marvellous representations of the curious inhabitants of the air! The shock of such a calamity was too much, even for the fortitude of Audubon. Like an electric stroke, it thrilled his whole nervous sys-

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tem, and for some time caused the entire prostration of his physical powers. A burning heat rushed through his brain on the discovery—the discovery of the entire wreck of the results of all his efforts and his patience! For nights he could not sleep, and days were passed with listless apathy, till at length invigoration of mind and frame gradually under kindly influences, returned. He once again took up his pencil, his note book, and his gun, and went forth to the woods. Then consoling himself with the reflection that he could make much better drawings than before, he persevered untiringly for three whole years, until his portfolio was replenished! [Memoirs of Audubon.

CITIES EXTRAORDINARY.

Baltimore is the "Monumental City," from the great battle monument, and several others of note within its limits.

Boston is the "Classic City, or Athens of America, from its acknowledged preeminence in the literary and fine-arts pursuits.

Cincinnati is the "Queen City," so christened when it was the undisputed commercial metropolis of the west; but I believe Chicago now sets up rival claims to that distinction.

Cleveland, O., is the "Forest City." from the peculiary rural aspect of its streets, squares, and private grounds, which makes it one of the most delightful cities in the United States.

Hartford, Ct., is the "Charter Oak City," from the famous Charter Oak of colonial history.

Louisville, Ky., is the "Falls City," from the falls of the Ohio at that point.

Montpelier, Vt., is the "Green Mountain City," being the capital of the Green Mountain State.

New Haven, Ct., is the "Elm City," I believe from the profusion of elm-tree ornaments in its streets.

New Orleans is the "Cresent City," from the half moon shape which the river once presented at that point. But the filling out from the city has materially changed the crescent.

New York is the "Empire City," or the great commercial emporium of the New World.

Philadelphia is the "Quaker City," from its broad-brimmed founders.

Pittsburgh, Pa., is the "Iron City," from its immense iron trade and manufacturies. It is also emphatically the "Smoky City."

Rochester is called the "Flour City,' owing to the number of its flouring mills—some of which are said to be the largest in the world.

VIRTUE is a rock from which rebound all the arrows shot against it.

MECHANICAL.

AMERICAN IMPROVEMENTS ADOPTED IN ENGLAND.

The following appears in the "North British Agriculturalist," and affords satisfactory proof, that some of our "cute" American inventions are *practically* appreciated abroad:

"The manufacture of small-arms, recently established by the Government at Enfield Lock, by means never before used in this country, and in no other, except the United States, and to a limited extent in Russia, has begun to assume a character of considerable interest, as affording the daily exhibition on a large scale of the application of machinery to processes of the most delicate kind. Though the scheme is as yet only partially developed, it has already attracted the attention of several Continental Governments. An immense quantity of valuable machinery has been imported from America, and is now in constant operation in various processes connected with the military gun manufacture. The whole establishment is under the immediate control and supervision of Colonel Dickson, of the Royal Artillery; and the first engineer is Mr. Burton, an intelligent American gentleman, formerly Master Armourer of the Government small arms factory, of the United States. At present, about 430 men and boys are employed on the different operations, but when the works are complete, the numbers will probably be doubled, of whom, three-fourths will be comparatively unskilled laborers. The whole of the plans when fully brought into operation, it is contemplated, will turn out in a perfect state, ready for use, some 50,000 rifles a year, or about 1,000 a week. Into all the various details of the manufacture we cannot, of course, enter; but besides the rapidity with which they are performed, far exceeding the capacity of any amount of hand labor, two other results have been attained of the greatest importance in a trade so peculiar as this, where a great national emergency might at any time create on a a sudden an immense demand for the article manufactured. The one is, that this machinery, guided by young men and boys taken from the plow tail, or any other of the humbler occupations of life, is capable of executing work until now performed by skilled operatives, specially trained to it, and by necessity with far more marvellous accuracy than was ever achieved by hand labor, however superior. Little boys not more than fourteen years of age, for example, are charged with the management of two, and sometimes three different machines performing simultaneously the same operation. Another result on which much stress is laid

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is, that every conceivable part of a musket, from all the small component portions of the lock upwards, is manufactured with such unerring precision that it will fit with surprising exactitude the place destined for it, not in a single musket alone, but in every other constructed in the establishment. All the respective materials are exact counterparts of each other; every barrel adapts itself to every stock, every bayonet to every barrel, and so on.

Touching the quality of the materials and work, at every single stage of its progress it undergoes a rigid examination, by which any defect is at once detected, and every minute article is made exactly to correspond with an unchangeable guage. The very tools used are manufactured on the premises and also by machinery in many instances. Although, however, all the rolling stock used at Enfield, was imported from the United States, a very considerable portion of the fine tools, with their fixings, employed in the machines, were made in this country, by highly skilled artizans. The machinery for making gunstocks is an exception, for it was specially and wholly fabricated in Massachusetts, and is of the most ingenious and efficient description. This department of the factory contains twenty-three machines, which perform sixteen distinct operations on the stock. A piece of walnut wood roughly sawn into the shape of a gun stock, is submitted to these manifold processes, which round it, scope out the bed for the barrel, do all the intricate manipulations required for reception of the mechanism of the lock and its appendages, and indeed, every other imaginable thing towards its completion, with the most consummate neatness and accuracy. Perhaps the most interesting and ingenious of all the machines in this department is, that by which the entire lock is let into the stock—a work involving much time and labor when performed by hand. By this machine a lock can be completely let into the stock in about three minutes. Indeed the whole proces of making and perfecting the stock does not occupy more than half an hour, and the only hand labor employed upon it, is that which causes the friction of a little sand paper along its surface, after its removal from the last machine. Col. Dickson says that they are able to make in this way 200 stocks a day, at a cost of little more than 1s. a piece, whereas, an expert workman, single-handed, would not be able to make more than eight or nine in a week, at a cost of 12s. 6d. a piece. The interest inspired by this large accumulation of machinery and its results, is enhanced by the reflection, that the whole of its complex operations are performed simultaneously, and derive their motion from a common source; that the machines which give shape and finish to the bayonet and the stock are propelled by the same engine which communicates motion to the mechanism which makes the lock, and so on through the whole series of results.

TRIAL OF THE LITTLE GIANT CORN MILL
At the Iowa State Fair.

The corn and cob mills were represented by the "Little Giant," (which seems ubiquitous), the "Star" and "Excelsior Young America," and an interesting contest took place for the set of silver tea service which had been placed at the disposal of the society, by James B. Chadwick, of your city, to be awarded to the best Mill. The committee determined upon twenty revolutions each for the mills, when they performed as follows: The Little Giant ground one and three-fourth bushels, the Star less than three-fourths of one bushel, and the Exelsior Young Amerion seven-eighths of one bushel of meal in the time. The committee unanimously decided in favor of the Little Giant, and awarded the silver service accordingly.

PORTABLE SAW MILLS AND SAWING MACHINES.

Pinney, Youngs & Co., Milwaukee, Wis., exhibit, in operation, one of their portable saw mills. It attracts great attention. The saw employed is a circular one, and the arrangement is such that it cuts both forward and back. The setting of the log, after each cut, is done by mechanism, so that the machine is self-acting in nearly all respects. We are told that logs can be placed on the carriage, and rapidly cut up into boards without labor on the part of the attendant, except to carry away the lumber. It is said that these machines will cut from 2000 to 2500 feet of siding per hour. This is great speed. The machine is simple, easily taken apart and set up, occupies little space. Price $1000 and upwards, according to size.

[Scientific American.

Traveling Steam Railroad.—Our foreign English cotemporaries are loud in their praises of the steam carriage of Jas. Boydell, of London, for drawing heavy loads over bad roads, for plowing, and for many other purposes. it has detached parts of flat rails on its wheels, and as these turn, the rails form bearings which prevent the wheels sinking into the soft soil. It is stated to have been very successful in plowing. The farmers on our prairies, who are anxious to get steam plows, will derive some information respecting the nature of this tramway steam engine by examining an engraving of such a carriage, illustrated on page 353, vol. 3, of the Scientific American.

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BERDAN'S AUTOMATIC OVEN.

An experiment is about being tried, with the design to introduce into the production of bread, more labor saving machinery, and all the varied economies and perfections arising from manufacturing on a large scale. Mr. H. Bedan, well known as an inventor of no ordinary merit, has constructed in the large and elegant building known as Central Hall, in Brooklin, an oven and appurtenances designed to supply bread of a uniformly superior character, and in quantities sufficient to supply all the retail bakers who choose to avail themselves of its advantages. The oven is to be worked night and day, and by the contraction and expansion of a long metalic strip inside, connected with the damper in the chimney, a perfectly uniform temperature is maintained in its interior. the oven is twenty-eight feet in length. A steam engine in constant operation outside gives motion to ingeniously arranged machinery, by which almost every operation is performed with more dispatch and perfection than hand labor is capable of. In the interior of the oven sixteen cars, or flat platforms, slowly descend, and an equal number rise, all loaded with bread. The cars each measure three by five feet. A car loaded with dough is drawn in at the top, and in twenty minutes afterward discharged at the bottom and dumped into a basket. After waiting thirty seconds to be loaded, it again enters the oven with cold dough, to be in its turn expelled at the top, all by self-acting mechanism. Doors are provided, also self-acting, by which the openings are tightly stopped, except at the moment a car is entering or emerging; and as there are never two doors open at the same time, there will never be a draught through the heated interior, but all the alcoholic or other valuable exhalations from the loaves will be retained, and, as experiments seem to indicate, with great advantage to the quality of the product.

Machinery previously invented by others is availed of, for mixing and kneeding the dough, and for stamping and cutting out the shapes in the manufacture of crackers, though the bread is kneeded by hand. The yeast is produced by steam heat, kept in oak tanks, at any temperature desired, and in case, despite these precautions, a tank should become in the slightest degree too sour, it is subsequently made available in producing soda biscuits, for which purpose considerable acidity is necessary.

The baking business, as usually conducted conducted on a very small scale, requires a very liberal profit to pay expences. With the facilities described, the manufacture of bread has been contracted for by an experienced baker, who will take charge of the establishment for 50 cents per barrel of flour consumed. The business of supplying bread will be commenced on the 28th of the present month, and according to the figures furnished us, 8 1-2 pounds of first quality of bread will be sold to the retailers for 11 cents, and will get into the hands of consumers for 12 1-2 cents, while only about 2 1-4 pounds is now procurable for a like sum. Viewed in this light, the experiment becomes interesting, not merely as a new form of industrial enterprise, but as of immediate practical importance to the struggling thousands with whom the relative price and nutritive value of a loaf is almost a question of life or death.

We have spoken of the operation as an experiment, but consider it only so with regard to the effect of the closed oven upon the character of the product. There are various opinions with regard to the value of bread baked on oven floors, as compared with that introduced in pans, &c.; but we believe all agree that much volatile material rises from bread in baking which might be saved by a successful tight oven. An experiment tried in baking in air tight retorts strongly illustrates this point. Equal quantities of similar dough were placed in tight retorts, one ten inches higher than the other and a pipe opened which put them in communication. The whole being placed in an oven for a sufficient time, the lower half was found to have lost 16 1-2 per cent of nutritive matter, and the upper one to have gained 16 per cent—the missing fraction being supposed to have been diffused in the end of the retorts.

STEAM PLOWS.

The Charleston Mass., Advertiser has been sent to us marked, in order to call our attention to an article in it, describing a steam plow stated to have been invented in the month of February last, by George Rumrell, an American gentleman who has resided for some years in Peru, and who made a contract with Messrs. Hettinger and Cook, of that place, to construct it. It is a locomotive or traction steam plow, designed for ten horse power, with two cylinders of five inch bore, each, and twenty inch stroke. It is intended to run six ploughs in a gang and and turn over six furrows, measuring four feet wide altogether. It is to be steered so as to turn in a very small space, and is well adapted for the light soil of Peru, where it is to be used. The object of it is the plowing of sugar cane fields, which are very level, and the bagasse, or dry sugar cane stalks, are to be used as fuel. It will weigh four tuns, carrying its own water.

We hope it will prove very successful; but the Advertiser is in error in stating that

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it is the first of its kind invented—that is, a locomotive to draw its plow after it. There have been two kinds of steam plows constructed and tried in England,—one having a stationery engine, fixed at one part of the field to be plowed, and dragging the plows through the soil by ropes passing over pulleys; the other being a locomotive, driving through the fields and dragging its plows.

Our opinion is most favorable to a locomotive traction plow; no other kind is suitable for agricultural purposes. A number of very successful experiments were made in England last month, at Chelmsford, at Hownslow, and Hanworth, with Boydell's steam locomotive plow, against horses, plowing the same field, and the London Engineer states that the cost of steam plowing is not over one-fifth that of horses. If this is so, then a great revolution in plowing is at hand; and our farmers on the Western prairies, may indulge hopes of having their wishes soon realized, and an efficient prairie steam plow provided for them.

LARGEST FLOURING MILLS IN THE WORLD.

The Richmond (Va.) Enquirer says:—"We notice that the extensive addition which is now in course of erection, by Messrs. Warwick & Barksdale, to their already mammoth flouring mills in this city, is progressing finely. The foundation of this new edifice is stone, sixteen feet thick; the brick wall averages five feet in thickness from the foundation. The length of the building is one hundred and ninety feet, its breadth ninety-five feet. When completed it will be eleven stories high. The cost of the addition, with machinery, and everything necessary to its operation, will not fall far short of $200,000. These mills will constitute, collectively, the largest flouring establishment in the world."

PERPETUAL MOTION.—We have frequent inquiries respecting a prize said to be offered by the British Government to the person who first discovers perpetual motion. No such reward has been offered—and if it were offered it never could be obtained for such a discovery will never be made. A perpetual motion is a machine which has an inherent power, to set and maintain itself in motion—a mechanical impossibility.

THE humble, meek, merciful, just, pious and devout souls are every where of one religion; and when death has taken off the mask, they will know one another, though the divers livery they wear makes them strangers here. [Pike.

Too much sensibility creates unhappiness; too much insensibility creates crime.

MISCELLANEOUS.

THE DEWDROP AND THE DIAMOND.

BY CHARLES MACKAY.

A DEWDROP, bright with all the rays
That summer noon could lend her,
Lay smiling on a rose's breast
In evanescent splendor.
"Behold," said Folly, passing by,
"This gem the rose adorning!
How like a pearl of priceless worth
It sparkles to the morning."

A diamond, lost from Beauty's brow,
Lay lonely in the by-way;
And heard the words that Folly spoke
Repeated from the highway.
"Ah me!" she said, "this transient thing
Extorts the praise of many;
While I am trodden in the dust—
Unseen, unknown of any."

Hush! Envy, hush! the true of heart
Should bear without repining;
Thy light is not the less thine own
That none can see it shining!
The dew exhaling in the sun
Shall fade from men's opinion,
While thou may'st live to grace a crown
In glory and dominion!

THE BRIDAL WINE CUP.

A THRILLING SKETCH.

"Pledge with wine—pledge!" cried the young and thoughtless Harvey Wood; "pledge with wine" ran through the crowd.

The beautiful bride grew pale—the decisive hour had come. She pressed her white hands together, and the leaves of the bridal wreath trembled on her brow; her breath became quicker, and her heart beat wilder.

"Yes, Marion, lay aside your scruples for this once," said the judge, in a low tone, going toward his daughter; "the company expect it. Do not seriously infringe upon the rules of etiquette; in your home, act as you please, but in mine, for this once, please me." Every eye was turned toward the bridal pair. Marion's principles were well known. Henry had been a convivialist, but of late his friends noticed the change in his manners, the difference in his habits, and that night they watched to see, as they sneeringly said, if he was tied down by a woman's opinion so soon. Pouring out a brimming beaker, they held it, with tempting smiles, toward Marion. She was very pale, though more composed, and her hand shook not, as she gracefully accepted the crystal tempter, and raised it to her lips. But scarcely had she done so, when every hand was arrested by her piercing exclamation of "Oh! how horrible!"

"What is it?" cried one and all, thronging together, for she slowly carried the glass at arm's length, and was fixedly regarding it as though it were some hideous object.

"Wait!" she answered, while an inspiring light shone from her dark eyes; "wait, and I will tell you. I see," she slowly added,

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pointing one jeweled finger at the sparkling liquid, "a sight that beggars all description, and yet listen, I will paint it for you, if I can. It is a lonely spot; tall mountains, crowned with verdure, rise in awful sublimity around; a river runs through, and bright flowers grow to the water's edge. There is a thick, warm mist, that the sun seeks in vain to pierce. Trees, lofty and beautiful, wave to the airy motion of the birds; but there—a group of Indians gather; they flit to and fro with something like sorrow upon their dark brows; and in the midst lies a manly form—but his dark cheeks grow deathly, his eyes wild with the fatal fire of fever. One friend stands beside him—nay, I should say kneels—for see, he is pillowing that poor head on his breast.

"Genius in ruins—oh! the high, holy-looking brow, why should death mark it? And he so young! Look, how he throws back the curls! See him clasp his hands! Hear his thrilling shrieks for life! mark how he clutches at the form of his companion, imploring to be saved! Oh! hear him call piteously his father's name—see him twine his fingers together, as he shrieks for his sister—his only sister, the twin of his soul—weeping for him in his distant native land.

"See!" she exclaimed, while the bridal party shrank back, the untasted wine trembling in their grasp, and the judge fell, overpowered upon his seat; "see, his arms are lifted to heaven—he prays, how wildly, for mercy! but fever rushes through his veins. The friend beside him is weeping; awe-stricken, the dark men move silently away, leaving the living and the dying together."

There was a hush in that princely parlor, broken only by what seemed a sob from some manly bosom. The bride stood yet upright, with quivering lip, and tears stealing to the outward edge of her lashes. Her beautiful arm had lost its extension, and the glass; with its little troubled red waves, came slowly toward the range of her vision. She spoke again; every lip was mute. Her voice was faint and low, yet awfully distinct. She still fixed her sorrowful glance upon the wine cup:

"It is evening now; the great, white moon is coming up, and its beams lay gently upon his forehead. He moves not—his eyes are set in their sockets—dim are their piercing glances—in vain his friends whisper the name of father and sister—death—and no soft hand, no gentle voice to soothe him. His head sinks back! One convulsive shudder—he is dead."

A groan ran through the assembly; so vivid was her description, so unearthly was her look, so inspired her manner, that what she described seemed actually to have taken place then and there. They noticed, also, that the bridegroom hid his face in his hands, and was weeping.

"Dead!" she repeated again, her lips quivering faster, and her voice more broken; "and they scoop him a grave, and there, without a shroud, they lay him down in the reeking earth. The only son of a proud father, idolized brother of a fond sister, and he sleeps to-day in that distant country, with no stone to mark the spot. There he lies—my father's son—my own twin brother!—a victim to this deadly poison. Father!" she exclaimed, turning suddenly, while the tears ran down her beautiful cheeks, "father, shall I drink now?"

The form of the old judge was convulsed with agony. He raised not his head, but in a smothered voice faltered: "No, no, my child, in God's name—no!"

She lifted the goblet, and letting it fall suddenly to the floor, it was dashed to a thousand pieces. Many a tearful eye watched her movement, and instantaneously every wine-glass was transferred to the marble on which it had been prepared. Then, as she looked at the fragments of crystal, she turned to the company, saying: "Let no friend hereafter, who loves me, tempt me to peril my soul for wine. No firmer are the everlasting hills than my resolve, God helping me, never to touch or taste that deadly poison. And he to whom I have given my hand—who watched over my brother's form in that last, solemn hour, and buried the dear wanderer in that land of gold, will, I trust, sustain me in that resolve. Will you not, my husband?"

His glistening eye, his sad, sweet smile, was her answer. The judge left the room, and when, an hour after, he returned, and in a more subdued manner took part in the entertainment of the bridal guests, no one could fail to see that he too had determined to banish the enemy at once and forever from his princely home. Those who were present at the wedding can never forget the impression so solemnly made. Many, from that hour, forswore the social glass. [Select.

STRUGGLES OF THE GREAT.

There is a milder and serener form of poverty, the nurse of manly energy, and heaven climbing thoughts, attended by Love, and Faith, and Hope, around whose steps the mountain breezes blow, and from whose countenances all the virtues gather strength. Look around you, upon the distinguished men that in every department of life, guide and control the times, and what was their original and early fortune? Were they, as a general rule, rocked and dandled in lap of wealth? No. Such men emerge from the homes of decent competence or struggling poverty. Necessity sharpens their faculties,

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and privations and sacrifice brace their moral nature. They learn the great art of self denial, and enjoy the happiness of having few wants. They know nothing of indifference or satiety. There is not an idle fibre in their frames. They put the vigor of a resolute purpose in every act. The edge of their minds is always kept sharp. In the shocks of life, men like these meet the softly nurtured darlings of prosperity as the vessel of iron meets the vessel of porcelain.

THE POETRY OF COMMERCE.

The Hon. Edward Everett, whose brilliant genius gives a golden tinge of poetry to every thing it touches, thus speaks of commerce in his late beautiful speech at the Peabody Testimonials:

Track its history for a moment from the earliest period. In the infancy of the world its caravans, like gigantic silkworms, went creeping through the arid wastes of Asia and Africa, with their infinitesimal legs, and bound the human family together in those vast regions as they bind it together now. Its colonial establishments scattered the grecian culture all around the shores of the Mediterranean, and carried the adventures of Tyre and Carthage of the North of Europe and the South of Africa. The walled cities of the middle ages prevented the arts and refinements of life from being trampled out of existence under the iron heel of the feudal powers. The Hanse Towns were the bullwark of liberty and property in the North and West of Europe for ages. The germ of the representative system sprang from the municipal franchises of the boroughs. At the revival of letters, the merchant princes of Florence received the fugitive arts of Greece into their palaces. The spirit of commercial adventure produced that movement in the fifteenth century, which carried Columbus to America, and Vasco de Gama around the cape of Good Hope. The deep foundations of the modern system of international law were laid in interests and rights of commerce, and the necessity of protecting them.

Commerce sprinkled the treasures of the newly found Indies throughout the western nations; it nerved the arm of civil and religious liberty in the Protestant world—it gradually carried the colonial system of Europe to the ends of the earth, and with it the elements of future independent, civilized republican governments. But why should we dwell on the past? What is it that gives vigor to the civilization of the present day, but the world-wide extension of commercial intercourse, by which all the products of the earth and of the ocean, of the soil, the mine, or the loom, of the forge, of bounteous nature, creative art and untiring indutry, are brought by the agencies of commerce into the universal market of demand and suply? No matter in what region a desirable product is bestowed on man by a liberal Providence, or fabricated by human skill. It may clothe the hills of China with its fragrant foliage—it may glitter in the golden sands of California—it may wallow in the depths of the Arctic seas—it may ripen and whiten in the fertile plains of the sunny South—it may spring forth from the flying shuttles of Manchester in England, or Manchester in America—the magnet great world of commerce attracts it alike, and gathers it all up for the service of man.

SORGHO SUCRE, OR CHINESE SUGAR CANE.

This new article seems to be attracting much attention among the lovers of novelty just at present. How much real value it will prove to have, is yet uncertain. Numbers through the State and West, have tried it during the past season, and report variously as to their success. Although most seem to expect important results from its cultivation either as an element for the manufacture of molasses, and sugar; or, at least as an article of green feed much superior to common corn. One gentleman assures us that he mixed the stalks of it with common corn stalks, and that the creatures to whom he fed it, at once selected the former from the latter, and eat it with an especial preference. Another gentleman sends us a circular from Atlanta Ga., (rather a suspicious origin among Wisconsin people, by the way,) setting forth the result of his experiments in molasses making, as follows:

"By suggestion of Gov. Hammond, of South Carolina, I determined to give the syrup making a fair trial; consequently ordered from the Messrs. Winship, of Atlanta, a very complete Horse Power Mill, with vertical iron rollers, that has worked admirably, crushing out juice for eight gallons of syrup per hour, worked by two mules, with one hand to put in the cane, and a boy to drive.

On the thirteenth of this month, finding the seed fully ripe, I had the fodder pulled, and the seed heads cut.

Yield for fodder per acre 1,000 to 1,800 lbs.

Yield of seed per acre 25 bushels of 36 lbs. to the bushel.

First trial of Mill, 70 average canes gave 29 quarts of juice.

606 averaged canes passed once through the rollers, gave 38 gals. 1 qrt. juice; passed a second time through, gave two gallons

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of juice; the 40 gals. 1 qrt. gave 8 gals. thick syrup.

I carefully measured an eighth of an acre, having the best canes and the best stand; another eighth having the poorest canes and the poorest stand. The result I give below; the cane passed once through the roller:

BEST EIGHTH OF AN ACRE.

Yield of juice from 3.815 Canes	258 gal.
Yield of Syrup from 258 gallons juice	58¼ gal.
Rates per acre of Syrup	466 gal.

POOREST EIGHTH OF AN ACRE.

Yield of juice from 2.500 Canes	179 gal.
Yield of Syrup from 179 gal. juice	46¼ gal.
Rate per acre of syrup	346 gal.
Weight of 30 selected Canes	49½ lbs.
Weight of juice pressed out	25¾ lbs.
Weight of crushed cane	23 lbs.
Loss in crushing	¾ lbs.
Weight of crushed cane dried in sun	9½ lbs.

Obtaining such unlooked for success with the Chinese Sugar Cane, I concluded to try our common corn.

From a "new ground," planted 3 by 3, one stalk to a hill, a week beyond the roasting-ear stage, I selected 30 stalks:

Weight of 30 stalks	35¾ lbs.
" " juice	15¼ lbs.
" " crushed stalks	19½ lbs.
Loss in crushing	¾ lbs.
Yield of Syrup	1½ pts.

The syrup is of a peculiar disagreeable taste, entirely unfit for table use.

The following tests were made at the mill, by Dr. Robert Battey, of Rome, Ga., a graduate of the Philadelphia College of Pharmacy:

Specific gravity of juice	11,035
" " Syrup	1,335
" " New Orleans Syrup	1,321
Themometer applied to Syrup	77°
" " " Juice	70°
Saccharometer " " Juice	25½°

The juice should be placed in the boilers immediately after being pressed out, then boiled slowly, until the green scum ceases to rise; then stir in a tea-spoonful of air slacked lime to five gallons of juice; continue skimming and boiling until the syrup thickens and hangs down in flakes on the rim of the dipper.

I have made the clearest of syrup by simply boiling and skimming, without lime or other clarifiers.

The lime is requsite to neutralize a portion of the acid in the juice, the true proportion must be determined by well conducted experiments.

The cost of making the syrup in upper Georgia, in my opinion, will not exceed ten to fifteen cents per gallon. This I shall be able to test another season, by planting and working up fifty acres of the cane.

I am satisfied that this plant will enable every farmer and planter in the Southern States to make at home all the syrup required for family use, and I believe that our chemists will soon teach us how to convert the syrup into sugar for export, as one of the staples of our favored clime.

RICHARD PETERS.

ATLANTA, Georgia, Sept. 26, 1856."

Such are some of the statements in relation to this new (we hope not *Discorea Battatus* article.) We intend to obtain a lot of the seed to furnish to such of our friends as work well for the FARMER and wish it.

WOOL MARKET.

NEW YORK, Oct. 25.—Domestic Fleece Wool continues in active demand. We notice further sales of 50,000 lbs. extra Ohio and Michigan fleeces at 52½c.; 20,000 lbs. medium No. 1 at 47½c.; 20,000 lbs. No. 1 at 44c.; 30,000 lbs. at 42½a 52½c. for medium to fine, and 12,000 to 15,000 lbs. half blood Ohio at 47½c., 6 mos., and small sales of fine select Ilinois fleeces at 56c. A large sale of extra Ohio Wool in the Cleveland market at 54c., 6 mos. Pulled Wool is in fair request at 42½a46c. for super and extra Country. Sales 15,000 lbs. at these rates.

BOSTON, Oct. 25.—The market for fleeces and pulled Wool is very firm, and full prices have been realized. The sales of the week have been 200,000 lbs., at prices in the range of quoted rates.

Saxony fleece,	52½a65
Am. full blood,	49a52
Am ¾ blood,	43a47
Am ½ blood,	41a43
Com to ¼ blood,	35a40
Western Mixed	32a40
Pulled, extra	45a52½
Do. superfine	40a45
Do. 1st quality,	35a40
Do. 2d do	22a30

The above prices for wool show that the prices being paid by western buyers are altogether below what they could afford to pay. If our people here, got those rates, minus freight and fair profit, wool growing would be the best business, altogether, that could be done at present. We are of the opinion that wool will bring the best price of any leading agricultural product for the next two or three years. EDS.

EGGS.—The French practical philosopher certainly knows how to make the most of things. Mons. de Sora has recently discovered the secret of making hens lay eggs every day in the year. He feeds them on horseflesh, and obtaines his suply of twenty-five or thirty a day, among the used-up hacks of the city. His henery, a few miles from Paris, has furnished about forty thousand dozen eggs a week, yielding the proprietor for seven days the round sum of $5,000,

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or $260,000 a year. Mons. de Sors employs about one hundred persons, mostly females, and his entire expences are about $75,000 a year, leaving him the handsome balance of $185,000 profit. He never allows a hen to set, and all his chickens are hatched by steam. The eggs are arranged upon shelves, and covered with blankets; and each morning a swarm of chickens are taken to the nursery. [Albany Register.

WRITERS FOR THE PRESS.

Many practical farmers, who have been taught in the best schools, that of experience —decline to write for the press because they have not received the education of scholars, and do not write in a smooth and elegant style. If they were solicited to contribute to the columns of literary papers, where style often passes for more than thought, this might be a legitimate excuse. But writers for the agricultural press need only two things, neither of which is dependent upon the graces of mere literature: 1st, Something to say; and 2d, A few clear, plain words in which to say it.

If our rural friends will bear these two points in mind, they may write to us as often as they have a leisure half hour, and we will stand all consequences. Nay, we solicit them to do so. We dare them to write us out of patience, if they think they can. We challenge them to put more interesting facts in a brief communication than we can publish. We defy them to write in language so plain that we cannot understand it. Let us see, now, which one of them will take up this gauntlet first. [Ky. Farm Journal.

We freely endorse the above article, and would commend it to the attention of our patrons and farmer friends. The more you write for the Farmer the better, so that you treat on subjcts you understand and of practical utility. If the style is not quite so polished, no matter, we can fix that part. Don't be out of patience if you do not appear at once, remember that in making up a paper, many articles even good ones have to be omitted. All communications should be sent in as soon as the first of the previous month, to be sure of appearing in the ensuing number. We hope and expect that our list of correspondents will be largely increased in the coming year. Those who would appear in the Jan. Number have no time to lose. [Eds.

In England, out of fifty millions acres cultivated, ten millions are annually sowed to wheat.

For the Farmer.

SAVING A CHOKED ANIMAL.

Messrs. Editors—Believing that my experiment on a choked animal may benefit some of your readers, I will give it to you, and if you think best you are at liberty to give it to the public. On the 1st of February last, a two year old steer of mine got choked with a small turnip, which came to a stand about half way down his neck, and after trying various remedies without any good result, I resolved to try cutting, being fully satisfied that he could live but a very short time, as he was already badly bloated. So with the assistance of two neighbors, who kept his head and feet still, I proceeded with a sharp knife to open his neck, on the left side, by a lengthwise cut, nearly three inches in length, and took the turnip out, which gave immediate relief to the suffering animal. I then washed the wound with water and proceeded to sew up the swallowing pipe, having previously provided a cutting or buckskin needle, with brown linen thread doubled. The cut in the pipe was about two and a half inches long, which I closed with six or seven stitches. I then closed the wound by sewing the hide in the same manner, and washed off with brine, and as soon as that had dried off rubbed on some Mustang Liniment, and then fastened a strip of cloth about his neck, to protect the sore against the intense cold. He immediately ate a peck of bran wet with warm water, and with a little extra care soon began to thrive; but after about eighteen days the thread all gave away, so that his food would partially lose through the incision. This did not long continue so, but after a few days it began to heal and soon closed. He is now sound, sleek and fat. I think that if I had waxed the thread with shoemaker's wax, or perhaps with beeswax, the thread would have held until the wound had healed. It is my belief that there are often cases in which this operation and no other will save life—especially when cattle are so choked that they would die before the usual remedies can be tried, but I would advise all who may try it to cut cautiously, as I found a vein or small artery, as large as a pipestem, lying directly on or against the swallowing pipe. It is possible that if I had cut the right side of the neck, I would have found none. Yours, truly. A. A. Hubbard.

Springvale, Fond du Lac Co., Oct. 1, '56.

Wild Hops are said to grow abundantly in the neighborhood of Corner and Glenco, Iowa. They have all the properties of the cultivated plant, and grows much more plentifully. A considerable trade is being carried on by the settlers of that region in this article of commerce.

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RECORD of METEOROLOGICAL CONDITIONS,

At Madison, Wisconsin, Latitude 43° 5' North, Longitude 12° 12' West. Altitude, 892 Feet above the Level of the Sea. JUNE, 1856.

BY A. SCHUE, M. D.

June, 1856.	Daily Indication of Barometer.	Mean Temp'ture.	Mean Hygrometer Indication.	Force, and principal course of winds.	REMARKS.
1	29.14	78		2 S.W.	
2	29.09	76		2 S.	Thunderstorm & slight R.
3	29.09	78		3 S.	Th. & Lightning, no R.
4	29.08	76		3 W.	
5	29.11	79		1 W.	
6	29.14	77		1 W.	
7	29.05	69		2 N.W	
8	29.04	74		1 W.	
9	29.03	75		1 N.W	
10	29.04	79		3 S.W.	
11	29.	75		4 S.	Thunderstorm & R. 6 p.m.
12	28 98	68		4 S.W	
13	29.	55		3 N.W	Slight Rain.
14	29. 7	62		3 S.W.	
15	29. 8	69		1 W.	
16	29. 4	70		2 S.W.	Rain all night.
17	28.98	68		2 W.	
18	29 16	70		1 S.	
19	29.13	77		1 S E.	
20	29.14	76		1 S.E.	
21	29.20	84		2 W.	
22	29.26	80		3 S.W.	4 p.m. Thunderstorm in
23	29.20	83		2 E.	[S.W. slight rain.
24	29. 8	68		2 N.W	Th'storm, very copious R.
25	29.10	75		1 S.	slt. show'r n't, light'g S.E.
26	29.1[illegible]	69		2 S.E.	very cop. r. fr'm 9 to 9 a.m.
27	29. 6	80		1 S.	rep't'd show'rs dur'g day
28	28.88	61		4 S.W.	Rain'd cop. during night.
29	28.87	75		1 W.	
30	29.19	69		2 W.	

Extremes of Barometer, maximum 29.30, minimum 28.80.
" " Thermometer, " 96 degs. " 53 degs.

Average Temp. during the month, — 73 degs.

Total amount of rain — 3 1-4.

The weather has been warm and plesant during the month. The heat is much mitigated by the cool breezes which arise at 10 a m. and last till 6 p.m.

N.B.—The Hygnometrical Observations had not been taken this month.

BEST BREED OF FOWLS.

GRAND SPRINGS, Nov. 6, 1856.

MESSRS. EDITORS—I notice in your October number, an inquiry, for the best kind of fowls, for actual family use. As I have had considerable experience in breeding fowls, I think I can safely say that the Dorking is the best fowl to buy, and the best to cook of any. They are of good size, and are fair setters. The Cochin China crossed with the native fowl makes still better setters, but a cross between the Dorking and common foul makes the best layers, and the best article of food. The Malay fowl, so common in Wisconsin, is a poor layer—coarse meated—and will eat four times its worth in six months after it is hatched. Hens should lay in six months from the time of hatching, if properly fed.

As to feeding which is of even more importance than breeds; there should always be corn, or grain of some kind, where they can have access to it, and plenty of meat of some kind, and you will always have plenty of eggs and chickens. It is always best to change the males every spring, and not let them breed "in and in," and you will have healthy fowls. I think it best to reserve the black fowls for wintering—they are more hardy than the white. I have raised twelve different breeds, and find a cross between the native and the Dorking the best for all purposes.

Yours truly, H. E. STORY.

RECORD of METEOROLOGICAL CONDITIONS.
FOR JULY, 1855.

JULY.	Daily Barometrical Indications.	Mean Temperature	Mean Hygrom.	Force, and Principal course of wind.	Remarks.
1	29.25	69	67	2 S.W.	
2	29.14	81	80	2 S.	8 a.m. sl't rain, 10 p.m. vivid
3	29.08	72	70	2 W.	l'tng in s.w h'y stm. night
4	29 18	74	70	1 N.W	Sheet Lightning in S.E.
5	29 11	79	79	1 N.W	
6	29.14	72	62	3 N.E.	
7	29.11	76	63	2 E.	
8	29.10	80	67	2 S.E.	
9	29.15	79	65	1 S.	Rained this afternoon.
10	29.09	78	72	1 S.	Rained during night
11	28.77	71	67	2 S.E.	Repeated showers of Rain
12	28.90	78	68	3 nnw	this day.
13	29.03	79	70	1 S.W	
14	29.04	74	69	1 W	
15	29 15	81	75	3 S.E.	
16	29.12	86	72	4 S.	quite a tempest has been ra-
17	29.16	77	63	3 S.W.	ging during the night.
18	29 25	78	62	3 W.	
19	29.40	75	61	2 E.	The weather is delightful.
20	29.40	75	62	2 S.	
21	29.42	76	64	4 N.W	
22	29.33	74	66	1 S.	Rained this afternoon sev-
23	29.37	82	71	2 S.E.	eral times.
24	29.32	84	71	1 S.	
25	29.24	83	69	1 S.W	
26	29.16	79	68	1 S.W.	
27	29.14	75	63	1 S.W.	slt. r. noon, ltn'g 11 pm r. n't.
28	29.08	77	71	2 S.W.	5 pm sud. & vio'nt gale f'm S.
29	29.08	77	65	3 W.	slight rain to-day
30	29.17	78	60	2 S W.	
31	29.13	77	62	2 S.	

Extremes of Barom., maximum — 29.45. min. — 28.73.
" " Temperature " — 97 deg. " —65 deg.

Average mean temperature, — 77 deg.

Total amount Rain,— 2.8

The weather during the month has been remarkably pleasant. The days warm and breezy, the nights cool and clear. No general sickness.

INVALUABLE REMEDIES.—Here are a few simple remedies for very prevalent disorders, which we have no hesitation in recommending as infallible:

For sea sickness—stay at home.
For drunkenness—drink cold water.
For health—take "Ayer's Pills."
For accidents—keep out of danger.
For Coughs and Colds—take Cherry Pectoral.

GENTLE WORDS will soften the hearts of those whose consciences have long been seared by crime and deep affliction.

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RECORD of METEOROLOGICAL CONDITIONS. FOR AUGUST, 1856.

August.	Daily indication of Barometer.	Mean Temperature	Mean Hygrometric	Force and Principal Course of Wind.	Remarks.
1	29.08	85	70	3 S.E.	A heavy storm last n't., bro't
2	29.15	58	59	2 W.	us a soaking shower.
3	29.23	69	60	1 W.	Rained this morning.
4	29.20	76	65	1 S.	Cool and clear.
5	29.27	74	68	2 S.E.	
6	29.22	75	65	2 S.W.	Breezy
7	29.20	66	59	4 N.W	
8	29.28	72	58	2 N.W	
9	29.20	78	61	4 S.	Wind very high.
10	29.08	75	59	2 S.W.	
11	29.05	70	60	1 W.	4p.m., surface cur'. w to a. up'r
12	29.02	56	58	2 N.W	lt'g contin's in a. [cur' w to e
13	29.07	71	57	2 N.W	
14	29.15	70	60	2 W.	
15	29.25	72	57	1 S.W.	Dense Fog this morning.
16	29.26	75	58	2 S.E.	
17	29.10	72	65	1 W.	Cloudy—mild.
18	28.90	72	66	2 W.	Slight rain to-day
19	29.00	70	62	2 W.	
20	29.10	78	61	1 W.	
21	29.10	71	64	3 S.	
22	29.00	72	64	1 W.	
23	29.16	73	61	2 W.	
24	29.22	67	58	2 N.W	Slight Rain this p.m.
25	29.33	65	54	2 W.	
26	29.30	65	56	2 S.	
27	29.20	71	61	1 S.	Rained slightly last night.
28	29.18	68	58	1 S.	
29	29.30	70	56	2 S.E.	
30	29.30	67	55	1 S.	
31	29.45	62	51	2 E.	

Extremes of Barom. Max. — 29.45. Min. — 28.90.
" " Temp. " — 98 deg. " — 58 deg.
Average mean Temperature — 70
Average Amount of Rain, — 1.38"

For the Farmer.

MINNESOTA, Sept. 16, 1856.

MESSRS. EDITORS—Can you or any of your readers give any information respecting the English Hedge Thorn seed, as I have got some sent from the Old Country this summer?

I wish to know the time and manner of planting. The directions from the Old Country are, to bury them for one year, then sow them in drills the next spring, and in one year they are ready for transplanting if well cared for the first summer.

WILLIAM ECKLES.

CHATFIELD, Fillmore Co., Minn.

Who can answer the foregoing question?

BUCKWHEAT CAKES.—One buckwheat cake "differeth from another in glory," yet not one in a thousand is made right. Yet, of all things, it is the easiest to cook, if the meal is made rightly. To every three bushels of buckwheat add one of good heavy oats; grind them together as if they were only buckwheat; thus you will have cakes always light and always brown, to say nothing of the greater digestibility, and the lightening of spirits, which are equally certain.

EDITOR'S TABLE.

To Our Readers—Close of the Volume.—

This number of the FARMER brings to a close the current volume, and clears the way for the commencement of another year. Our readers will doubtless remember how much we promised at the outset, and are now able to judge how well or ill we have performed. We hope we have carried through the twelve successive numbers of the volume, in as good shape, and in as good season, as any of our neighbors. By our enlargement from 32 to 48 pages, we have given to our readers, *one half more reading matter, than any other original dollar agricultural paper, west of Boston, in the whole country;* besides neatly-covering, stitching, binding and trimming, so that they are at all times ready to read, without jack-knife, scissors, or fingers, to tear open the leaves, or needle and thread to stitch them together.

These facts we mention not to boast, but that all may fully understand that we give them at least fifty per cent. more for their money than most of our neighbors; and this we do for the formerly avowed purpose of extending the circulation of a good home agricultural paper, as widely as possible. At present it leaves us no compensation whatever for our labors, except a hope, and consciousness, of doing good. This we are aware, would to many seem a poor compensation, and we should also consider it the same, if our bread, or bank notes, depended for payment on it; but luckily they do not.

What we ask in return for these absolutely unpaid-for labors, on our part, is the hearty and thorough co-operation of our friends and readers, everywhere, in extending our circulation. Our subscription list, for the current year has been large, considering all the circumstances under which we started—probably larger than any other western agricultural journal; but still it has not been half what it ought to be the coming year. In Many districts, even in our own State, we have had few, and in some instances, no subscribers; whilst in many of our best agricultural neighborhoods, we have had but scanty lists. Still, in now and then an instance, when we have happened to meet with thorough and good workers, we have had reason to be proud as well as thankful for the lists they have rolled us up. If this were the proper place, we should like to mention some of these special and good working friends. May it not be our good fortune to find more of the same kind? Give us one good hearty worker in each locality—one that is not too lazy, too proud, or too timid to absolutely ask and urge his neighbors to take the FARMER—and how soon would our edition run up from eight to

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twenty thousand per month. Twenty thousand, among an agricultural and business population of six hundred thousand in our own State, would only be one copy to thirty persons. Is that not a small enough circulation for a good home agricultural journal, detailing every important fact, from month to month, and publishing all the more important proceedings of our County and State Agricultural Societies, and doing it, withal, at the lowest possible cost? We will leave the question for our friends and the public to answer.

This number will contain our Prospectus, setting forth more fully our course and purposes for the next year, and from which it will be seen that the Januray number for 1857 will soon be issued. Will not our friends take the subject at once in hand, and urge us up good large lists of subscribers; not only all of those of the present year, but hosts of new ones in addition, and forward them as soon as may be, that we may be able to form some conjecture how large an edition to print, to meet the demand, and thereby save the necessity that we are now subjected to, of setting up and re-printing the January No. of the present year, at a large extra expense. Yes, friends of the FARMER, and of Wisconsin progress, hurry in your lists; work as hard for us for a month to come as we shall have to for the entire year, to get you out an acceptable paper; and we will be satisfied with the results. Will you do it?

During the winter and spring, we shall avail ourselves of many choice articles, in the way of rare seeds from the Patent Office and elsewhere, of Agricultural and Patent Office Reports, and other choice books, for the purpose of distribution among those friends who labor for us—not intending that any shall go unrewarded for their invaluable service to us.

Postmasters, editors, and all who have labored for us during the past year, have our hearty thanks; and may rest assured that their kindnesses are fully appreciated, and will at all times be requited, as opportunity presents. With these rather incoherent remarks, we submit the closing number of this volume, and its interest, to our and its friends, and shall patiently and confidingly await their verdict.

Smithsonian Institute.—

We are also in receipt for the State Agricultural Society of the 8th Vol. of the Smithsonian Contributions to Knowledge. Like its predecessors it is a noble Volume, made up of the most valuable scientific and philosophical material, on excellent paper, and to all appearance every way worthy of the Society from which it eminates.

CHOICE SEEDS AND CUTTINGS—For Gratuitous Distribution Among our Friends.—

We would say to our friends, that we are making arrangements to avail ourselves of a choice collection of rare and valuable seeds, of various descriptions, embracing divers fruit and ornamental trees and shrubs, rare garden vegetables, select flowers and plants. The most desirable of everything, not ordinarily within the reach of people, especially in a new country. These we are intending expressly to distribute, gratis, among the working friends of the FARMER. We are prompted to this by a two-fold purpose, the first of which is, to induce thorough action among our friends, who, by the way, will almost always work a little better for a motive; and the last, though not the least, is to disseminate as widely as possible, the means of progress and usefulness, among the great masses of the people. We believe that $500, distributed annually as presents by us, in choice seeds and cuttings, among our 20.000 readers, and going as they invariably will, into the hands of the most enterprising in every neighborhood, will be of more real sterling benefit to the State and people than nine-tenths of the legislation that they annually get, at a cost of $100,000 per annum.

Simultaneously with the distribution of all such articles, we shall publish the fullest instructions as to the proper modes of planting and cultivation.

Meantime, between this and the first of February, we would like to have our friends suggest to us any particular kinds that they would prefer, and we will be on the lookout for them. We have made arrangements with the Patent Office Department, and with the best seed dealers in New York, Boston and Philadelphia, to furnish us at the shortest notice, with everything desirable, in America or Europe. We wish it expressly understood, however, *that we do not wish to be troubled with dealing in, or furnishing anybody with anything of the sort, except to subscribers, and active working friends of the Farmer.* This much we say, for the reason that we are not regular seed dealers, and we don't intend to be, except within the circle of our friends.

New Books.—

Gray's Manual of the Botany of the Northern United States. Second edition, 8 Vo. 1856. All persons at all interested in the study of our native plants, will be glad to learn that this long-looked-for work is at last out much improved, extended so as to include the plants of Kentucky and Virginia; and illustrated with fourteen beautiful plates representing the genera of the lower and more obscure orders. It is a work that no botanist can do without.

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Binding the Farmer.—

We are happy to apprise our friends, that we have made arrangements for binding the FARMER, in the most neat and substantial style, in embossed muslin covers, with gilt lettered and ornamental backs. Our covers are made expressly for the job, in New York. Our price will be three shillings per volume, in lots of 10 and over; and 40 cents for single copies, which is not more than half what any ordinary binders will charge for similar binding.

We have gone into this arrangement, because we have a large quantity we wish to bind for ourselves, and because we wish to furnish every possible inducement to our subscribers, to preserve their copies of the FARMER, in a permanent and useful form. They will make a decidedly neat-looking and readable book; and when bound will be valued by every one at more than they have cost.

The way will be, to make them up in snug packages, and send them in, by the Members of the Legislature. We can usually have them bound at once, so as to be returned in the same way, the first opportunity.

We urge all to try it, this season, and see if they are not well pleased with the result. Any who may have missing or injured copies, can usually have them replaced by us, without charge, as we have plenty of odd copies of most of the numbers. Send them in, gentlemen, and let us make you a book.

Machinery, and Notable Articles at State Fair.—

We shall refer extensively to these matters in the forthcoming January No., and should have done so before now, but for the large amount of other Agricultural Society material, that has necessarily crowded our paper. The greatest characteristic of this age, as we have before said, is its mechanical ingenuity, in the department of invention. In this respect, Wisconsin is not a whit behind the rest of her neighbors, which among other things, we will conclusively show, when we get the subject in hand. In future numbers we shall dwell largely upon the mechanical development, in all its important bearings upon agriculture, progress and wealth.

Address at State Fair.—

We publish in this No. the address of the Hon. A. C. BARRY at the State Fair. It is an able and sensible document, and will be read with especial interest by the farmers of the State who had not the good fortune to hear it addressed.

We add eight extra pages to this No. to make room for the large amount of State Agricultural matter that it is desirable to publish, to properly close the subject, with the volume.

School Books—an Omission.—

By an oversight the advertisement of A. S. BARNES & Co., of New York, was omitted in the October Number of the FARMER—but this omission we are glad to learn has not materially retarded the introduction of their popular series of school books, as it is steadily gaining ground with teachers and friends of education in this State. The advertisement will be found in the proper place this month—to the recommendations accompanying which we would call the attention of those who may not have had an opportunity of examining the series.

We have received a new class book of Chemistry from these enterprising publishers, Messrs. BARNS & Co., which from a hasty perusal we think is more comprehensive and explicit, and better adapted to the use of schools, than any book on this important study, now before the public—John A. Porter is its author.

Madison Female Seminary.—

See advertisement of this institution, recently established in this city, by JOSEPH PICKARD, A. M. He has the reputation of being a thorough-going and able teacher, and we understand is giving high satisfaction. Those wishing to have their daughters well educated, in a pleasant and quiet school, can hardly do better than to patronize this deservedly popular institution. Mr. P. is a brother of the founder and eminently successful Principal of the Plattville Academy—one of the most popular schools in the West. We predict that the Madison Female Seminary will not be less so, after it has had time to become known.

Arthur's Home Magazine—

Comes to us with its accustomed promptitude and attractions. MISS TOWNSEND is to commence an original Novellette in the January number which can hardly fail of being a rich treat to the lovers of such reading. The work will hereafter contain a beautiful colored steel fashion plate in each number, and in all is one of the most readable of the monthlies in the line of light literature, and decidedly cheap at $2 per year. A new volume commences with January. Addres T. S. Arthur & Co., Philadelphia.

Andre Le Roy & Co.—

See the advertisement of this old and well known establishment. All wishing to import direct, the articles in their line of trade cannot do better than to patronize them.

J. M. F.—

We are indebted to some friend of the above initials for several valuable Vermont State Documents for which he has our thanks. If we knew his address we would reciprocate such favors with pleasure.

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Premiums on Field Crops.—

STATE AGRICULTURAL ROOMS,
MADISON, NOV. 10, 1856.

Those intending to compete on field crops for the premiums offered by the State Agricultural Society, for 1856, will not forget to forward the necessary statements on the subject, by the 1st of December, to this office. D. J. POWERS, Act. Sec'y.

MADISON FEMALE SEMINARY.

JOSEPH C. PICKARD, A. M., PRINCIPAL.
MISS CLEMENTINE P. EMMONS, ASSOCIATE.

With other Teachers in the several departments of Instruction.

To Young Ladies and Misses this Institution offers educational facilities of the highest order.

LECTURES in connection with studies pursued will be given from time to time, by persons of eminent ability.

LIBRARY.—There are now about one thousand volumes, for the use of which the pupils pay a small sum.

A TEACHERS' CLASS will be organized during the third term, and such instruction given as is best adapted to fit Teachers for their work.

TERMS BEGIN:

1. Third Wednesday of September.
2. First Monday of January.
3. Fourth Wednesday of April, and continue thirteen weeks each.

CHARGES---IN ADVANCE.

In English and Classical Department—Drawing included—$10 per term.

For further information apply to
J. C. PICKARD, Principal.

MADISON, Wis., Dec. 1, 1856. tf.

FRUIT TREES AND FARM AND GARDEN SEEDS, FOR SALE.

THE UNDERSIGNED offers for sale a choice lot of Fruit Trees, among them 3,000 Apple trees, of good size and hardy leading varieties, at from 18 to 25 cents—1,000 Pear trees, from 4 to 8 feet standards, hardy sorts, among them 400 winter Nellis—a lot of Flemish Beauty, &c.—at from 50 to 75 cents. 800 Plums, from 4 to 8 feet, hardy sorts—Purple Favorite, Duane's Purple, Lambert, Columbia, &c. 100 dozen Gooseberry plants, from 2 to 4 years old, hardy sorts—Houghton's Seedling. White Smith's, Roaring Lion, Yellow Sulfar, White Amber, &c.—$2 per dozen. 500 dozen Raspberries, White and Red Antwerps—at 25 cents per dozen. Strawberry plants—Burr's New Pine, McAvoy's Superior, Hovey's Seedling, and Early Scarlet—25 to 50 cents per dozen. 1000 Mammoth Cahoon's Seedling Pie Plant, at 50 cents. 300 Victoria, at 50 cents.

GRAPES—Isabella, one year, 25 cents; two years and upwards, 50 cents. Vermont Seedling, very fine and hardy sort—stood our last winter without protection—25 to 50 cents.

NOTE.—As all the above mentioned trees, &c., have been raised here, and been tested through our severe seasons without protection, I consider them just what is wanted for the West.

FARM SEEDS.

200 bushels Golden Drop Spring Wheat, at $2 per bush.
125 bushels Poland Oats..... $1 do
250 White Scotch do ..... 75cts do
20 bushels King Phillip's Seed Corn, at 75 cents per peck.
A small lot of Skin and Beardless Barley, of which I will send samples to any one enclosing two 3 cent postage stamps.

GARDEN SEEDS.

I have a choice collection of Water Melon Seeds, of which I will send to any one for 25 cents, a package of the different varieties, namely: Orange Rind, Ice Cream, South American, Black Spanish, White Spanish, Mexican, Cuba, Valparaiso and Mountain Sprout, with directions how to raise them. Also a quantity of Large Southern Marrow and Mammoth Squash, and all other kinds of garden seeds, at 6 cents a paper.

☞ All orders, to receive prompt attention, should be accompanied with the money. GEO. P. PEFFER.

PEWAUKEE, Wis., Dec. 1, 1856. tf.

AYER'S CHERRY PECTORAL,

FOR the rapid cure of Coughs, Colds, Hoarseness, Bronchitis, Whooping Coughs, Asthma and Consumption, is universally known as the best remedy ever yet discovered for every variety of Pulmonary disease. So wide is the field of its usefulness and so numerous the cases of its cures, that almost every section of the country abounds in persons publicly known, who have been restored from alarming and even desperate diseases of the lungs by its use. When once tried its superiority over every other medicine of its kind is too apparent to escape observation, and where its virtues are known, the public no longer hesitate what antidote to employ for the distressing and dangerous affections of the pulmonary organs which are incident to our climate. By its timely use many, nay almost all attacks of disease upon the Lungs or Throat, are arrested, and thus are saved many thousands every year from a premature grave. No family should be without it, and those who do neglect to provide themselves with a remedy which wards off this dangerous class of diseases will have cause to deplore it when it is too late. Proofs of the surprising efficacy of the Cherry Pectoral need not be given to the American people,—they have living proofs in every neighborhood. But those who wish to read the statements of those whose whole health has been restored and whose lives have been saved by its use, will find them in my American Almanac, which the agents below named have to furnish gratis to every one.

Prepared by Dr. J C. AYER, Lowell, Mass.,—and sold by COLWELL & CO., and WRIGHT & PAINE, Madison, and Druggists everywhere.

J. H. REED & CO, Chicago, Wholesale Agents.

Dec. 1, 1856. 3m.

WEENONAH.

THIS CELEBRATED Fruit and Stock Farm is now for sale, in whole or in lots, to suit purchasers. Weenonah is situated in the towns of Summit and Delafield, in Waukesha County. It contains about 340 acres of choice land, in sight of the Milwaukee & Watertown Railroad. It commands a view of three of the most beautiful lakes in both towns, with nearly a mile of Lake front. It is one of the most beautiful farms in the whole State, adjoins the Nashotah Mission, and is within reach of several Saw and Flouring Mills. On the farm are about 500 Fruit Trees (Apples, Plums, Peaches and Cherries,) of superior quality; it is known as the best Fruit Farm in the State. There is a good dwelling and out houses—good Barn, Stable, Ice-House—good Fish Pond, &c., &c. It is offered with or without the Stock, among which are a flock of 200 of the finest French and Spanish Merino Sheep in the State, carefully selected and cost from $15 to $500 each, a good many horses, cattle, &c. It is 25 miles from Milwaukee; 200 acres under cultivation. This farm is capable of being divided into farms of from 210 to 80 acres each, to suit purchasers, giving to each division an abundant supply of water, Timber, and Highway conveniences.

For particulars apply to J. S. FILLMORE,
No. 2, Juneau Block, Milwaukee, Wis.

Dec. 1, 1856. tf.

Agricultural Notice.

THE Annual Meeting of the Wisconsin State Agricultural Society, will be held in their room in Bruen's Block in the city of Madison, on Wednesday, the 3d day of December next, at 8 o'cock P. M., at which time a President, Treasurer, and three members of the Executive Committee, will be elected.

Madison, Nov. 8, 1856. GEO. O. TIFFANY,

☞ Friends of Agriculture throughout the State please copy

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Madison Agricultural WAREHOUSE.

OF

SAMUEL R. FOX.

SAMUEL R. FOX, at his General Hardware Establishment, Morris Street, Madison, keeps constanaly on hand a large stock of Grand de Tour, Whitewater and Janesville

CROSS, BREAKING & CORN PLOWS,

Cultivators, Harrows, Cultivator and Harrow Teeth, Corn Shellers, Straw Cutters, of various patterns, Railroad & Garden Wheel Barrows, Road Scrapers, Chain Pumps with Wood and Iron Curbs and Tubing, Patent and Common Ox Yokes, Grind Stones and Hangings, Thermometer Churns, Well Wheels and Buckets, Whiffletrees and Neck-Yokes, Post Augers, Picks and Mattocks, Wagon Jacks, Fanning Mills, &c.

Among his

HAYING AND HARVESTING TOOLS

may be found

50 Dozen Beardsley's Cast Steel Grass Scythes.
50 " Blood's " " " "
50 " North Wayne, " " " "
10 " Beardsley's Silver " Grain "
50 " Scythe Snaths, various patterns,
1,000 Superior Hand Rakes.
50 " Horse "
150 Morgan's Grain Cradles.
150 Grand de Tour " "
100 Pinney & Lawson's Grain Cradles.
50 doz. two tine Hay Forks.
50 " three tine Straw "
20 " long and D handled Manure Forks.
50 " riveted Hoes.
100 " Oxford Solid Shank Cast Steel Hoes.
20 " Tuttle's No. 2, S. S. " " "

Confident of my ability to please, I solicit an examination of these goods before you purchase.

SAMUEL R. FOX,
apr-tf At sign of Pad Lock, Morris Street.

Madison Steam Planing Mill,

AND

SASH, DOOR AND BLIND

MANUFACTORY,

CORNER OF WILSON & LIVINGSTON STREETS, NORTHEAST SIDE OF TOWN, NEAR THE GAS WORKS—MADISON, WIS.

MADISON SLEAM PLANING MILL.

THE ABOVE ESTABLISHMENT was erected last Spring, although laboring under many difficulties, by the delay of machinery and other causes, and we are now prepared to manufacture extensively, and on short notice. We will have on hand for Spring business One thousand well seasoned Doors, ranging from 2. 6×6. 6. to 2.10×7ft., 1¼ & 1⅛⅜in. thich. two and four pannels.

ALSO—Sash of all sizes for Four Thousand Windows. Persons wishing arficles not on hand can have their orders filled on short notice. We also make a great variety of Mouldings—ranging in price from fifty cents per hundred feet in length to ten dollars per hundred feet. We keep a large assortment of Newells & Banisters constantly on hand. Farmer's will please notice, Planing and Sawing done to order, and at a much cheaper rate than can be done by physical strength, and a great saving of time and labor. Barn Covering Planed at a great eoonomy to the building public. Please notice by our Bills, found in all the public places of the city.

Persons wishing articles in our line, can do as well as at Milwaukee or Chicago. A liberal discount made to Wholesale trade. STEVENS & DONNEL.

MADISON, Wis., June, '56. tf.

AGRICULTURAL TOOLS,

OF ALL DESCRIPTIONS, CAN BE FOUND AT THE OLD AND WELL KNOWN ESTABLISHMENT OF

TIBBITS & GORDON.

THE Proprietors being ever ready at the command of their Customers, to order from Manufacturers any Tools or Implements required, or to act as agents for Patentees, in Introducing or Selling Rights. They have now on hand the following Goods for Spring trade to wit: "Seymour's" unrivalled SEED DRILL or Broad Cast Sower—warranted; Emery's Patent GRAIN DRILL;
Emery's Patent GARDEN SEED "
" " HORSE POWER THRESHER,
" " CORN PLANTER;
Burnhill's " CORN PLANTER,
Wright's Celebrated CORN CULTIVATOR,
Peckham's "Self Sharpening" " TEETH,
Billing's & Carman's BREAKING PLOWS,
" " CROSS "
" " CAST STEEL ".

Joice's "Starr" CORN & COB CRUSHER. Southern & Boston CORN SHELLER, Straw, Feed, and Vegetable Cutters, Grant's Celebrated Fanning Mills, Boston Fanning Mills. Ox Yokes full trimmed, Woods do., Bows, Staples and Rings, Double and Single Whiffletrees, Iron Wedges, Beetle Rings, Drag Teeth, Waggon Neck Yokes, Sledges and Hammers, Ames' Shovels and Spades, Grain Scoops, Well Wheels and Buckets, Wheel Barrows—every article, in fact, which a farmer needs. They are also prepared to receive orders from merchants for Hay and Harvest Tools, as follows:

One Hundred doz. Silver, Cast, and German Steel Grass Scythes, Twenty-five doz Silver, Cast, and German Grain Scythes—One hundred doz. Pinney & Lamson's 1, 2 & 3 Snathes, Five hundred Morgan's celebrated Grain Cradles—Two hundred doz. Hay & Straw Forks—Five hundred dozen Hay Rakes of excellent finish—One hundred Solid Head Hoes—One hundred Rivited Hoes—&c., &c.

The above Goods are of very superior quality and finish, and stand unequaled.

TIBBITS & GORDON have also on hand, to supply early demand, Five hundred asserted sizes Lake Huron Grindstones—Three hundred " " Berea " Three hundred " " Common Ohio Grindstones—at Wholesale or Retail.

TIBBITS & GORDON.
MADISON, Feb. 1856. tf.

BARKER'S PATENT.

DOUBLE ACTING FORCE & LIFT PUMP.

The World Challenged to Produce its Superior.

THIS being the only PUMP now in use which will discharge a *Continual Stream of Water*, makes it the most desirable article known for either

MINING, STEAM ENGINES, MILLING, OR FOR DOMESTIC USE,

as every variety of them, whether Cistern, Well, Engine, Mine or Railroad Pump can be changed in a minute to be used as a perfect

FIRE ENGINE.

In places where large quantities of Water are required in a short space of time, its capacity has been fully and satisfactorily tested as dozens of letters will prove, from the most eminent Railroad Superintendents in New York State, which letters assert that it is the most powerful and simple

Railroad Station Pump

ever before invented and used in that State.

The subscribers having become Agents for the sale of *RIGHTS TO MANUFACTURE OR VEND* in all the Counties of this State would respectfully invite the attention of *Steam Saw or Grist Mill Proprietors, Miners, Manufacturers, and Railroad Superintendents*, to a thorough investigation of the merits of this Pump; Samples of which can be seen at their store in Madison, and any information given in regard to them.

Jan. TIBBITS & GORDON.

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COOK & BELDEN,

Capital House Block, Madison, Wis.,
Have constantly on hand a complete Assortment of

Watches, Jewelry,

PURE SILVER AND PLATED WARE,
FANCY GOODS, CLOCKS, &C.

All Goods warranted as represented or money refunded. Silver Work bought at our store is engraved free of charge. Watches and Jewelry Repaired and Warranted, by *Experienced Workmen.* tf.
MADISON, August, 1856.

1856.] MILWAUKEE [1856.

STOVE STORE,

ISAAC BONNEL—AGENT,

Wholesale and Retail Dealer in Stoves, Tin and Japanned Ware, and Agent for

Herring's Champion Safes,

FAIRBANK'S PATENT SCALES,

WAREHOUSE TRUCKS,

Cistern and Well Pumps, Corn Shellers, Clothes Horse Castings, Flat Iron Heaters, Charcoal Furnaces, Robinson's Patent Double-Acting Downward Draft Gridiron, &c., &c. Also Manufacturers of

Tin, Sheet Iron, Copper & Zinc Ware.

JOB WORK

Of every description done at short notice, and on the most reasonable terms.

MORRIS STREET, NEAR CAPITAL HOUSE, MADISON, WIS.

N. B.—Goods sold at Milwaukee prices, adding transportation. Terms Cash.

MADISON, Wis., Aug. 1, 1856. tf.

NEW JEWELRY STORE.

LOOMIS & HOES,

No. 201, East Water Street, Martin's Block,

MILWAUKEE, WIS.

WHOLESALE AND RETAIL DEALERS, AND

Importers of Fine Watches,

JEWELRY, DIAMONDS, SILVER WARE,
AND

FANCY GOODS.

ALSO WATCH TOOLS, MATERIALS, GLASS, REGULATORS, &C.

All kinds of Goods honestly represented, and as cheap as

any house West of New York.

Repairing, &c., Done to Order.

L. L. LOOMIS. J. H. HOES.
MILWAUKEE, May 1, 1856. tf.

MENDOTA NURSERY.

A MILE AND A HALF WEST OF THE
STATE UNIVERSITY.

TREES, SHRUBS, VINES &C., &C.

H. F. BOND.
MADISON, Wis., Aug., 1856. tf.

FURNITURE!

1856! [redacted] 1856!

O. C. BUCK & Co.,

MANUFACTURERS AND DEALERS IN

Cabinet and Upholstery.

Rooms on Washington Avenue, East of the American Hotel, and on Morris Street, near the Court House, Madison, Wis.

KEEP constantly on hand everything wanted in the Furnishing line. Buying all our Goods in the Eastern market, we can of course sell cheaper than establishments purchasing of Western Jobbers.

Beds and Bedding,

Of all kinds and qualities. Mattresses, Hair, Excelsior, Husk and Sea Grass. Take your choice and we can suit all tastes.

SOFAS, CHAIRS, CENTRE-TABLES, BEDSTEADS LOUNGES, WARDROBES, BUREAUX, SIDE-BOARDS, LOOKING GLASSES, &C., &C.

Together with innumerable articles too small and numerous to mention, and too useful to be overlooked. We are now prepared to supply orders at wholesale as well as retail as heretofore. Country merchants will take notice.

Look out for the Big sign on Washington Avenue, East of the American Hotel

O. C. BUCK,
WM. HAWLEY,
C. C. CHURCH.

MADISON, August 1, 1856. tf.

Boston Boot and Shoe STORE.

Magnificent Stock and New Arrangements.

HAVING purchased the magnificent stock of Boots and Shoes of Willis, Nell & Co., I am now prepared to offer to the people of Madison and vicinity, an extensive assortment of custom made work, from the Best Manufacturer in the East, and at Eastern Prices. My motto is, "Low Prices, Small Profits, and Quick Sales." For the Ladies, Misses and Children, my assortment of Boots, Gaiters, Buskins and Slippers, of every variety and style, both quality and price, is not equalled in the West. For the Gentlemen, Boys and Youths, I have almost everything worn or called for; every style and variety of *Boots, Congress Gaiters,—Oxford, French and Jersey Ties*—and a great variety of Boots and Shoes which, for style, quality and price, cannot fail to please everybody.

At Curtis' old Stand, Near the Capital House.

D. M. BURWELL.
MADISON, Wis., Aug. 1, 1856. tf.

Madison Plow Factory,

BILLINGS & CARMAN

ARE NOW MANUFACTURING at their Plow Factory, all sizes of Crossing and Breaking Plows, of the best materials and in workmanlike manner. They request the particular attention of Farmers to their hardened Plows which, for cheapness and durability, are not equalled by any other.

We are also manufacturing a large lot of Cast Steel Plows, and we feel confident that their equal cannot be found East or West, for strength, durability, lightness of draught, convenience to sharpen, or perfection of work. We shall keep on hand Corn and Shovel Plows, and various other Agricultural Tools in our line.

We would also call your attention to our Breaking Plows, which we sell cheaper than any plows of the kind offered in this market.

☞ TIBBITS & GORDON are the only agents in Madison.

C. H. BILLINGS. S. H. CARMAN.
MADISON, Feb. 1, 1856.

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BACON'S
MADISON
Mercantile College

Corner of Mifflin and Pinckney Streets,
MADISON, - - - - - WISCONSIN.
Branch of Bacon's Mercantile College, Cincinnati, O.

THE UNDERSIGNED respectfully announces that he has got his new College Edefice completed, the School opened for the reception of Pupils, and all necessary arrangements made for giving a more comprehensive and thorough course of Commercial Instruction than can be obtained in any other school in the Western country—and equal in every respect to the course of instruction given in my old and established College in Cincinnati, Ohio.

The course of Instruction embraces Book Keeping by DOUBLE ENTRY, as adapted to every department of Trade and Commerce; Commercial Calculations, Penmanship, Lectures on Commercial Law, the Science of Accounts, Customs of Merchants, and other Commercial Topics. The plan adopted in teaching combines Practice with Theory, and thus qualifies the student at once for the active duties of the Counting Room.

Students may enter at any time that best suits their convenience. A course can be completed in from six to ten weeks, though the time is unlimited.

TERMS:

For a full Course of Instruction, - - - - $40.00.

☞ For further particulars, address

R. S. BACON, Principal.

MADISON, Wis., Oct. 1, 1856. tf.

ANDRE LEROY'S
NURSERIES,
ANGERS, - - - - FRANCE.

MR. ANDRE LEROY, Member of the principal Horticultural and Agricultural Societies of Europe and America, and lately promoted by the French Emperor to the rank of Knight of the Legion of Honor, for the best nursery products exhibited at the World's Fair held in Paris, begs leave to inform his friends and the public, that he has just published his New Catalogue for 1856, being more extensive and complete than that of any similar establishment on the continent. It contains the prices of all the Fruit, Ornamental and Evergreen Trees, Shrubs, Roses, Camellias, Stocks, Seedlings, &c., &c., with the necessary information for importing the same.

He is experienced in putting up orders for America, and the superior qualities of his Plants have been too well appreciated during a period of 10 years, to require further comment.

The Catalogue can be obtained free of charge, on application to the undersigned Agent, who will also receive and forward the orders. Mr. A. Leroy is happy in being able to state that his nurseries were not reached by the inundation which so recently devastated a portion of the district in which they are situated.

ANDRE LEROY. Angers, France.
F. A. BRUGUIERE, Sole Agent,
188, Pearl Street. New York.

OCTOBER, 1, 1856. 3m.

A RARE CHANCE!
A FARM IN WAUKESHA COUNTY
FOR SALE.

A FARM of 300 acres, in the town of Delafield, situated on that Splendid Road from Waukesha to Delafield. It has a good House and Barn, and is otherwise under good improvements, and will be sold for $4,000 on easy terms. It lies within one hour's ride of M. & M. & M. & W Railroads. It is known as the "Kellogg Farm."

For particulars inquire of

J. S. FILLMORE.
No. 2 Juneau Block, Milwaukee, Wis.

OCTOBER 1, 1856. tf.

NURSERY STOCK
FOR SALE.

40,000 Apple stocks, 2 years old at $5 per 1000.
5,000 Mozzard Cherry do, 1 year old at $8 per 1000.
3,000 Horse Chestnuts, 1 yr. old, at $20 pr. 1000 or $2,50 per 100.
1,000 American Mountain Ash, 2 yr's old, at $3 per 100.
Apple scions of leading varieties at $5 per 1000.
Pear and Plum scions at $3 per 100

Address, STICKNEY & LOVELAND,
Box 468, Milwaukee.

NEW MILLINERY STORE.
NO. 4, WASHINGTON AVENUE,
MADISON, - - - - - WISCONSIN.

HAVING just returned from the East, with a full assortment of MILLINERY GOODS, I take pleasure in calling the attention of the Ladies to my newly selected stock of

Bonnets, Ribbons, Flowers,

and a general assortment of Fancy Goods, among which are MANTILLAS, plain and fancy SHAWLS, and

SILKS AND, CASHMERES,

together with an elegant lot of Dress Goods. Also *YANKEE NOTIONS*, in great variety, ALL of which I invite you to call and see.

R. F. POWERS.

MADISON, Wis., June, '56. tf.

City Crockery Store.
No. 155 East Water Street, Milwaukee, Wisconsin
M. G. ELMORE & CO.,
Importers and Wholesale and Retail Dealers in China, Glass and Earthen Ware, Lamps, Brittannia, and House Furnishing Wares, and Manufacturers of Looking Glasses.

THE Subscribers having recently established a house for the sale of the above Goods in this city, respectfully solicit a call from buyers. We have the Largest Store, the Largest Stock, the Finest Goods, and will sell Lower than Goods have heretofore been sold in this or the Chicago market.

CROCKERY.—Our assortment is unsurpassed—having recently received of our own Importation a large Stock, T. & R. Boote's manufacture and the newest patterns.

CHINA.—Rich, White, Gilt and Decorated, Tea and Dinner Sets—varying in price from $8 to $200.

GLASS.—A large variety, both Cut and Pressed, among which may be found the New Diamond Goods.

LAMPS.—Both Hanging and Stand—for Oil, Camphene and Fluid, new designs.

LOOKING-GLASSES.—From the cheapest to the Best French Plate.

GAS FIXTURES.—The largest assortment of Cornelius, celebrated manufacture. Some very rich patterns, as high as $150 a Chandelier.

TABLE CUTLERY.—Silver Plated, Brittania, Japanned and Planished Tin Wares. In fact, a complete assortment of all the Goods usually kept in a first class Crockery Store.

FANCY GOODS.—We have a Stock formerly comprising the "Temple of Fancy," which we offer At Cost, having bought them to get possession of the Store now occupied by us, and wanting the room now occupied by them for the Crockery Trade.

M. G. ELMORE & CO.

MILWAUKEE, Wis., Sept. 1, 1856. tf.

LANSING BONNEL,
89 & 91 *East Water Street, Milwaukee, Wisconsin,*
MANUFACTURER OF

THE Celebrated King of Stoves and Forest Oak, (two of the best Stoves ever made.) Also, every variety of Box and Parlor Stove. Tinners Stock, in any quantity. Agent for the sale of Herring's Safes, Fairbank's Scales, and Spratt's Self-Sealing Cans, for preserving in a fresh state Fruits and Vegetables.

☞ Circulars of all the above articles will be sent on application to me.

MILWAUKEE, Sept. 1, 1856. tf.

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Annual Report
OF THE
MADISON MUTUAL
INSURANCE COMPANY,
FOR THE YEAR 1856.

THE TOTAL amount of Property Insured to date,..... $1,374,284 00
Total amount of Premium Notes received,.. 21,500 00
do do Cash Premiums received..... 11,454 00
do number of Policies issued,..... 2,121
Total amount of Premiums received to date, $32,954 64
do do Losses and Expenses paid to date, 9,871 48

Balance in favor of the Co., Jan, 1, 1856,.... $23,083 24

There are no outstanding liabilities against the Company, and no assessments have ever been made upon the Premium Notes.

The Company has been in successful operation five years, paid all legitimate claims and demands promptly, and as the above report shows, has accumulated a handsome surplus.

Persons desiring Insurance upon their Dwelling Houses, Barns and contents, against the casualties of Fire, will readily appreciate the advantages which this Company affords, as no risks are taken upon any other description of property. The business of the Company will be strictly confined to this particular class of risks, avoiding all property in cities and exposed parts of villages, and by pursuing, without deviation, the prudent system adopted and which has thus far proved eminently successful, the Directors hope to continue the prosperity of the Company, and to offer to farmers and others wishing Insurance, a safe and reliable Company in which to Insure their Property against

LOSS OR DAMAGE BY FIRE.

Officers:

B. F. HOPKINS, *Sec'y* N. W. DEAN, *President.*
L. J. FARWELL, *Treas'r.* D. J. POWERS, *V. Pres.*

Directors:

L. J. FARWELL, N. W. DEAN. SIMEON MILLS,
L. W. HOYT, W. N. SEYMOUR, H. A. TENNEY,
D. J. POWERS, A. F. CADY, D. ATWOOD,
F. G. TIBBITS, B. F. HOPKINS, WM. C. WELLS.

C. C. OLIN, General Agent.

MADISON, Jan., 1856, tf.

D. S. DURRIE,
Wholesale and Retail Dealer in
BOOKS AND STATIONERY,
BLANK BOOKS, WALL PAPER,
AND FANCY GOODS,
BRUHN'S BLOCK, MADISON, WISCONSIN.
BOOK BINDERY
CONNECTED WITH THIS ESTABLISHMENT.

Book Binding
DONE AT THIS OFFICE.
MAGAZINES, MUSIC AND
Miscellaneous Books Bound on Reasonable Terms.
Blank Books Manufactured.
POWERS & SKINNER.
MADISON, Wis, Aug., 1856.

E. B. CRAWFORD,
FASHIONABLE MERCHANT TAILOR,
KING ST., NEAR THE MADISON HOUSE,
Madison, Wisconsin.

Suffolk Pigs,
OF PURE BLOOD ---- FOR SALE BY
A. G. HANFORD.
WAUKESHA, Wis., Sept. 1, 1856. tf.

A. B. VANCOTT'S
JEWELRY STORE!!
NORTH-EAST CORNER OF
East Water and Wisconsin Streets, Milwaukee.

THIS old and well tried establishment is as new as ever, in its full tide of prosperity. The stock of Goods is new and choice, and the prices so favorable as to make the place a favorite and desirable resort for persons of all ages, sexes and conditions.

The Stock is the largest and most desirable ever brought to the western market. New Goods of our own importation and manufacture, which will be sold to the trade at the lowest New York Jobbing prices.

Jewelers, Merchants and Peddlers, will do well to call before going East or purchasing elsewhere. Among this Stock may be found a full assortment of WATCHES, from the most celebrated manufacturers, together with JEWELRY of every kind of the most fashionable patterns. Also—MASONIC JEWELS and REGALIAS of our own manufacture. Watch Glasses and Materials; also, Watch Maker's Tools, of every variety.

The proprietor is thankful for past favors, and requests a continuance of them

MILWAUKEE, Sept. 1, 1856. tf.

Notice To Stock Breeders.
FOR SALE—The very Superior Imported Durham Bull, "ROTHERSTHORPE," 2 years old, (928 A. H. B., vol. 2 p. 225,) bred by Geo. Falkner, Esq., Rothersthorpe, Northamptonshire, England. Also a pure bred DURHAM BULL CALF, sired by Imported "Rothersthorpe"—Dam, Imported "Diana," also bred by Mr. Falkner, (See A. H. B., vol. 2 p. 350,)

The above animals are of a rich red color, with a little white, and descended from some of the best herds in England.

☞ For Price, Pedigree, or to view the animals, apply to the subscriber, JOHN. P. ROE,
MUSKEGO, Waukesha Co., Wis., Sept. 1, 1856. tf.

Nursery Stock For Sale.
20,000 APPLE GRAFTS, one year, of fair size, embracing 25 of the best varieties—true to name. Price, $30 per thousand 10,000 Buckthorn Plants, for hedges, one year. Price, $5 per 1,000. 10,000 Acacia, (three thorned for hedges,) fine plants, very hardy, 2 years, price $5 per 1,000. Pie Plant, three best varieties, in quantity, from $5 to $25 per 100.

The above will be lifted about the 1st of Nov., or earlier if desired; delivered at the Railroad Depot, in Watertown or Whitewater, if in large quantity.

Orders should be sent in early.

Standard Trees of Apples, &c., in quantity; also Dwarfs and Garden Fruits of all kinds. Fine Evergreens, and large varieties of Ornamental Shrubs, Roses, &c., Root Grafts will be for sale during winter and spring—securely packed for transportation, any time.

Please call and examine, or address
J. C. FLUMB & CO.
LAKE MILLS NURSERY, Wis., Sept. 1, 1856. 3m.

FRUIT TREES.
A CHOICE Collection of Fruit Trees, Shrubs, Vines, Plants, Roses, Dahlias, Evergreens, &c., Cultivated and for Sale by A. G. HANFORD, at his Nursery, Waukesha Co., Wis.

Apple, Pear, Plum and Cherry Trees, Grape Vines, Currants, Gooseberries, Raspberries and Strawberries in variety. Pie Plant and Asparagus Roots. Houghton's Seedling Gooseberry—Antwerps and Franconia Raspberries, in quantity for market planting.

ROSES.—Hybrid China, Prairie, Moss, Hybrid Perpetual, &c. Many beautiful sorts—some of them superb.

☞ Careful selections of Fruits suitable for the Orchard and Garden, will be made by the proprietor when desired. A. G. HANFORD,
WAUKESHA, Wis., Sept. 1, 1856. 3m.

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UNIVERSITY OF WISCONSIN.

Faculty.

J. H. LATHROP, LL. D., Chancellor, and Professor of Ethics, Civil Polity and Political Economy.
DANIEL READ, LL. D., Professor of Mental Philosophy, Logic, Rhetoric and English Literature.
JOHN W. STERLING, A. M., Professor of Mathematics, Natural Philosophy and Astronomy.
EZRA S. CARR, M. D., Professor of Chemistry and Natural History.
O. M. CONOVER, A. M., Professor of Ancient Languages, and Literature.
J. P. FUCHS, M. D., Professor of Modern Languages, and Lecturer on Physiology.
AUGUSTUS L. SMITH, A. B., Tutor.

Terms,—Begin:

1.—Third Wednesday of September.
2.—First Wednesday of January.
3.—Fourth Wednesday of April, and continue through thirteen weeks each.
COMMENCEMENT:—Fourth Wednesday of July.

CHARGES—In Advance.

TUITION FEE, per term of thirteen weeks,		$4,00
ROOM RENT, do	do.	3,00
WOOD, (winter terms,)	do, (maximum,)	7,00
BOARD, IN HALL,	do do	25,00
WASHING,	do do	5,00

On the last three charges, a drawback will be allowed if above cost.

NORMAL DEPARTMENT.

PROFESSOR READ will give a course of professional instruction in the Art of Teaching, beginning on the third Wednesday of May, running through the Summer term,

AGRICULTURAL DEPARTMENT.

PROFESSOR CARR will deliver a course of Lectures on Agricultural Chemistry, and the Application of Science to the Useful Arts, in the Laboratory of the University simultaneously with the Normal session.

J. H. LATHROP, CHANCELLOR.

Madison, April, 1. tf,

LA CROSE and MILWAUKEE R. R.

GEO. H. GREEN & CO.,

PRODUCE AGENTS & COMMISSION MERCHANTS.

WILL attend to the sale of all kinds of Country Produce, and obtain the highest market prices.

Returns promptly made. Consignments respectfully solicited. Office opposite La Crosse & Milwaukee Depot, Milwaukee, Wis., Feb., 1856. t.f.

CLOTHING.

M. FRIEND & BROS.

Have Received by American Express,

THE SPRING AND SUMMER

FASHIONS.

NEW STYLE

FRENCH AND AMERICAN

CASSIMERES,

FRENCH PLAIDS—SILK MIXED.

BEAUTIFUL PATTERNS

Black Doeskins,

OF EVERY QUALITY.

BROADCLOTHS, OF EVERY COLOR AND DESCRIPTION.

Vestings—a Beautiful Assortment.

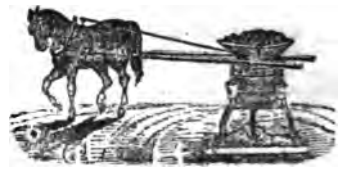
GENTS. CRAVATS

and Furnishing Goods, too numerous to mention—all of which will be sold cheap for CASH.

M. FRIEND & BROS.

No. 9, King Street, MADISON, June, 1856. tf

IMPROVED LITTLE GIANT



CORN AND COB MILL.

PATENTED MAY 16TH, 1854.

THE LITTLE GIANT, manufactured by SCOTT & HEDGES, of Cincinnati, Ohio, has been extensively introduced and tested during the past year, and has invariably given the most unqualified satisfaction, as was proved by a trial at Cincinnati on the 22d of February last. A Committee composed of Gov. WRIGHT, Hon. H. L. ELSWORTH, of Indiana, Col. S. D. HARRIS of the Ohio *Cultivator*, WM. DUANE WILSON, of the Iowa *Farmer*, Capt. ORIN SMITH, of Galena, Illinois, Mr. MOORE, of Ky., and Mr. BARWISE, of Mo., awarded a prize of $250 Silver Plate to the Little Giant, for

DOING MORE WORK AND GRINDING FINER

than any of the contestants on the ground.

It is not confined to the grinding of Corn in the Ear alone, but may be used to grind Hominy and fine Meal from Shelled Corn; so that any person possessing one of these Mills, can save his

TOLL, TIME AND LABOR

of going to mill, It is also simple and easily set up. No extra gearing is required to run it, and in can be managed by a Boy.

The undersigned, having purchased the Exclusive Right of Sale in this State, of James B. Chasdick of St. Louis, Mo., is prepared to furnish them to farmers and Dealers.

Price—No. 2 Complete, $45,00—will grind 8 to 10 bushels of feed per hour, with one horse. No. 3 Complete, $55.00, will grind 15 bushels of feed per hour with one horse. No. 4 Complete will grind 20 bushels of feed per hour with two horses. Price, $65.

FOR SALE by W. A. GRAY, No. 24 Spring St., Milwaukee, to whom all orders must be addressed.

W. A. GRAY.

MILWAUKEE, June 1856. 1y.

WHITEWATER

PLOW FACTORY,

Foundry and Machine Shop.

WINCHESTER & DeWOLF,

PROPRIETORS.

HAVING enlarged our Shop, and made numerous accessions to it, we possess superior facilities for doing work promptly and satisfactorily. A few more of our improved steel and cast Plows, on hand and for sale.

All kinds of Castings made to order. Every description of

THRESHING MACHINES.

repaired on short notice. jan-tf.

Our plows are for sale by S. R. FOX, Madison, Wis.,
L. A. WINCHESTER, WM. DeWOLF.

INGRAHAM GOULD,

PROPRIETOR OF THE

DODGE COUNTY NURSERY,

BEAVER DAM, DODGE CO., WIS.

Wholesale and Retail Dealer in Fruit and Ornamental Trees, Shrubs, Plants, Seeds, &c.

☞ Al Communications promptly Attended to. ☜

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SCHOOL BOOKS FOR WISCONSIN!

RECOMMENDED JANUARY 19TH, 1856, BY

HON. A. C. BARRY, State Superintendent.

It is proper to state that the following Books were selected among others, by the Hon. A. C. Barry, to be the Text Books for the State of Wisconsin, as per his letter to the Publishers, under date of January 19, 1856, in which he states that he had recommended them:

GEOGRAPHIES.

MONTEITH'S FIRST LESSONS IN GEOGRAPHY,.....15
MONTEITH'S YOUTH'S MANUAL OF GEOGRAPHY,.....50
McNALLY'S COMPLETE SYSTEM OF GEOGRAPHY,.....1,00

In cheapness, adaptation to the different grades of schools, improved methods, and execution, these Geographies according to the testimony of many of the best Teachers, are unsurpassed. (See testimonials.)

The new series of Geographies, by JAMES MONTEITH and FRANCIS McNALLY, is generally admitted by those who have examined or used it, to be better adapted to the present wants of the school-room than any other published. They are *practical*, complete, concise, well made and cheap. "Monteith's First Lessons in Geography" presents the outlines of the subject in a simple and attractive form, and does not fail to interes the beginner. "Monteith's Manual in Geography," is made for primary or intermediate classes. It gives the leading features of Geography combined with History and Astronomy, in a manner so well arranged and condensed as to make it possible for the beginner, who may have the advantages of school no more than three months in the year, to complete the subject in that time, and possess himself of a general knowledge of the entire matter. This is just the book for *Country Schools* that are taught only a part of the year.

McNALLY'S "School Geography" completes the series. This is a quarto of 98 pages, and is designed for advanced classes. It is a new book, and not only contains many radical improvements in the *manner* of treating the subject, but all the late statistical information, and the changes in the political division. It would be impossible to give here all the improvements which recommend this book, but the main one, and that which readily will give it favor with all scientific instructors, is that it is the only book extant which embraces the science of Geography only. History and Astronomy are studied as distinct sciences. Why should not the Geography be entitled to the same consideration? Our best teachers have long been annoyed with the lumber and foreign matter, introduced into the Geographies put into the hands of their pupils. The immense popularity of this work considering the short time since its publication, proves that it is eminently adapted to the present wants of our schools.

ARITHMETICS.

DAVIES' PRIMARY ARITHMEMIC, (*Revised Edition.*).....15
DAVIES' INTELECTUAL ARITHMETIC, (*Revised Edition.*).....25
DAVIES' NEW SCHOOL ARITHMETIC, (*Revised Edition.*).....40
DAVIES' UNIVERSITY ARITHMETIC, (*Revised Edition.*).....75

Davies' Arithmetics are in more general use than any others. Teachers are attached to them for the brevity and correctness of their definitions and their simplicity of style. They need no praise, having been so long known, and so universally used, that there are but few teachers who are not acquainted with them. The "Intellectual" possesses all the excellencies of Colburn's, without its defects of system. The revised edition of the "School Arithmetic" is meeting with unlimited success and favors East and West. The attention of Teachers is especially called to the merits of these books.

DAVIES' ELEMENTARY ALGEBRA.....75
DAVIES' ELEMENTARY GEOMETRY,.....1,00
DAVIES' BOURDON'S ALGEBRA,.....1,50
DAVIES' LEGENDRE'S GEOMETRY,.....1,50
DAVIES' ELEMENTS OF SURVEYING,.....1,50
DAVIES' CALCULUS,.....1,50
DAVIES' DICTIONARY OF MATHEMATICS,.....2,50

ENGLISH GRAMMAR, COMPOSITION, &C.

CLARK'S NEW ENGLISH GRAMMAR,.....60
WELCH'S ANALYSIS OF THE ENGLISH SENTENCE,.....75
BROOKFIELD'S FIRST BOOK IN COMPOSITION,.....40
WEIGHT'S ANALYTICAL ORTHOGRAPHY,.....25

PARKER'S WORD BUILDER,.....25
NORTHEND'S DICTATION EXERCISES,.....25

HISTORIES.

WILLARD'S SCHOOL HISTORY OF THE UNITED STATES,.....75
WILLARD'S LARGER HISTORY OF THE UNITED STATES,.....1,50
WILLARD'S UNIVERSAL HISTORY,.....1,50
WILLARD'S HISTORIC GUIDE,.....62½

Mrs. Willard's Histories are the Standard works throughout the United States.

Natural Philosophy.

PARKER'S JUVENILE PHILOSOPHY, Part First,.....25
PARKER'S FIRST LESSONS IN NATURAL PHILOSOPHY,.....35
PARKER'S SCHOOL PHILOSOPHY,.....1,00

These books are rapidly superseding other works upon this subject.

FULTON & EASTMAN'S BOOK KEEPING,.....75
BLANKS TO FULTON & EASTMAN'S BOOK KEEPING, six in a set,.....75

Teachers and School Officers will receive by mail, any of these recommended books for examination on the receipt of *ONE HALF THE PRICES* given above—*Postage free.*

To those wishing to introduce these books into schools, we will furnish them at *LARGE DEDUCTIONS* from the above prices. Address the publishers—

A. S. BARNES & CO., New York, or
E. B. GRAY, Milwaukee, Pub. Agent.

IN PRESS—SCHOOL CHEMISTRY, by Professor John A. Porter. Will be published on the first of July.

MILWAUKEE, August, 1856. tf.

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MORGAN HORSES.

A Premium Essay on the Origin,

History, and Characteristics of this remarkable

AMERICAN BREED OF HORSES.

Tracing the Pedigree from the original Justin Morgan, through the most noted progeny, down to the present time.

WITH NUMEROUS PORTRAITS.

To which are added

HINTS FOR BREEDING, BREAKING,

AND GENERAL USE AND MANAGEMENT OF HORSES,

with practical directions for training them for Exhibition at Agricultural Fairs.

BY D. G. LINSLEY, MIDDLEBURY, VT.

Price One Dollar. Sent Free of Postage.

Oct28-1t. C. M. SAXTON & CO.,
Agricultural book publishers, 140 Fulton st., N. Y.

GREAT BARGAIN!

FARM FOR SALE!!

THE FINE FARM consisting of the east ½ of east ½ of section 23, west ½ of northeast ¼ section 24, and south-east ¼ of north-west ¼ section 24, town 7, north of range 18 east, said to contain 300 acres, and generally known as the Kellogg Farm, is now for sale, and the attention of all persons in want of a great bargain, a paying investment, and desirous of becoming possessors of a remunerating tract of land, is called to this notice.

The subscriber has directions to sell the above mentioned splendid property, at a great sacrifice. It is situated in the fertile county of Waukesha, within an easy distance of the Milwaukee & Mississippi R. R. Depot, at Waukesha, and is one of the fastest improving portions of the State, and will be sold for 3,000. For particulars, &c., apply to J. S. FILLMORE,
Nov. 1856. tf. No. 2, Juneau Block.

COLORED

PHOTOGRAPHS!!

BE IT remembered, that Johnson & Fuller have been awarded by the Wisconsin State Agricultural Society, the

HIGHEST PREMIUM

for the best pictures produced in the State; and we have only to say to those who wish Colored Photographs, or any other style of portrait, to "Just walk right up to the Captain's office," and be taken.

Those having old Daguerreotypes of deceased friends, which in time may entirely disappear or fade out, by sending them to Johnson & Fuller, with a description of the color of the hair, eyes and general complexion, may have them copied large size, and colored in a style to almost equal life itself.

Also, ivory miniatures, beautifully painted from old pictures. C. A. JOHNSON.
Nov. 1856. tf. J. S. FULLER.

SEACOR OR LAWTON

BLACKBERRY.

THE Undersigned would inform the public, that he will have a choice lot of the above Celebrated Blackberry Roots for sale, about the first of October next, coming so direct from their original source, as to leave no doubt of their genuineness. They are undoubtedly the best Blackberry in the world, combining all the desirable qualities of large size, fine flavor, prolific bearing, great hardiness, and easy Cultivation. We shall be able to furnish them individually, or by the dozen.

Price—50 cents each, or $5 per dozen.

We will forward them, securely packed by mail, to those sending orders enclosing the money.

JAMES L. TOWNSEND.
Cambridge, Dane Co., Wis., Sept. 1, 1856. tf.

H. B. MERRILL & Co.,

(SUCCESSORS TO COBB & MERRILL.)

WOULD respectfully inform the gentlemen of Madison and vicinity, that they have now received their Spring Stock of the following Goods, comprising every Variety and Quality of goods for men's wear, viz:

READY-MADE CLOTHING,

Of the most approved and reliable summer styles, manufactured expressly for this Establishment.

HATS, CAPS, AND STRAW GOODS,

Of the latest styles. Boots, Shoes, and Rubbers, of every variety.

GENTLEMEN'S FURNISHING GOODS,

Consisting in part of Gloves, Shirts, Collars, Cravats, Ties, Adjustments, Stocks, Canes, Suspenders, Under Garments, &c,

Our Tailoring Department

Is now managed by an experienced New York City Cutter, and we warrant every article made under his supervision to give perfect and entire satisfaction.

It is our aim to render our establishmedt the

Great Depot

For all Goods of Men's Wear, and by studying carefully the wants of our customers, and visiting the Eastern Markets every ninety days, we hope to merit the continuance of public favor.

☞ All goods shown cheerfully, represented fairly, and submitted to the purchaser's taste and judgment.

H. B. MERRELL & CO.

Jy'56tf. No 3, FAIRCHILD'S BLOCK, MADISON, WIS.

LAKE SIDE WATER CURE,

NEAR

MADISON,

THE CAPITAL OF WISCONSIN.

A HOME

FOR INVALIDS AND THEIR FRIENDS.

THE PROPRIETORS have the pleasure to announce that they have secured the services of Doctor E. A. KITTREDGE, of Boston, the eminent physician and popular lecturer upon the principles of Hydropathy, to take charge of the Institution. The reputation of this distinguished practitioner, who was the first American to adopt the Hydropathic treatment, and who showed such commendable zeal in his efforts to obtain a thorough knowledge of the principles and practice of the Hydriatic art, by visiting the principal Hydropathic institutions of this country and Europe, is, they trust, a sufficient guarantee that the invalids who resort hither will be properly and thoroughly treated.

DR. KITTREDGE administers the celebrated "Electro Chemical Baths," so beneficial in cases of chronic disease, and in extracting mercurial and other mineral poisons from the system, and he will demonstrate by experiments to any one curious in such matters, the efficacy of this wonderful remedy.

The Institution is capable of accommodating One Hundred guests—is furnished in a superior manner in all its apartments, suited to the purpose for which it was constructed. It is situated on the South shore of the beautiful Lake Monona, opposite in full view of the City of Madison, and sufficiently removed from the public thoroughfares and locality of business to insure undisturbed quiet to the invalid.

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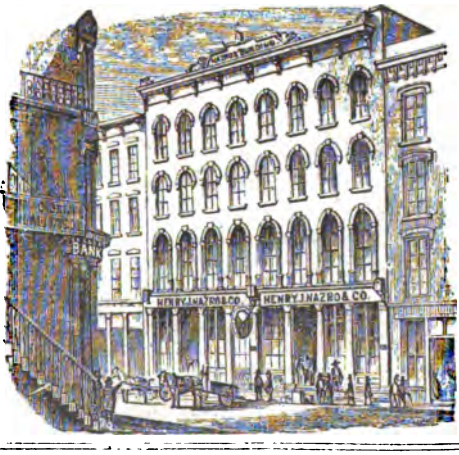

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